

GUIDED BY CLARITY:

SHAPING AI PRACTICES TO ENHANCE STUDENT PERFORMANCE & WELLBEING

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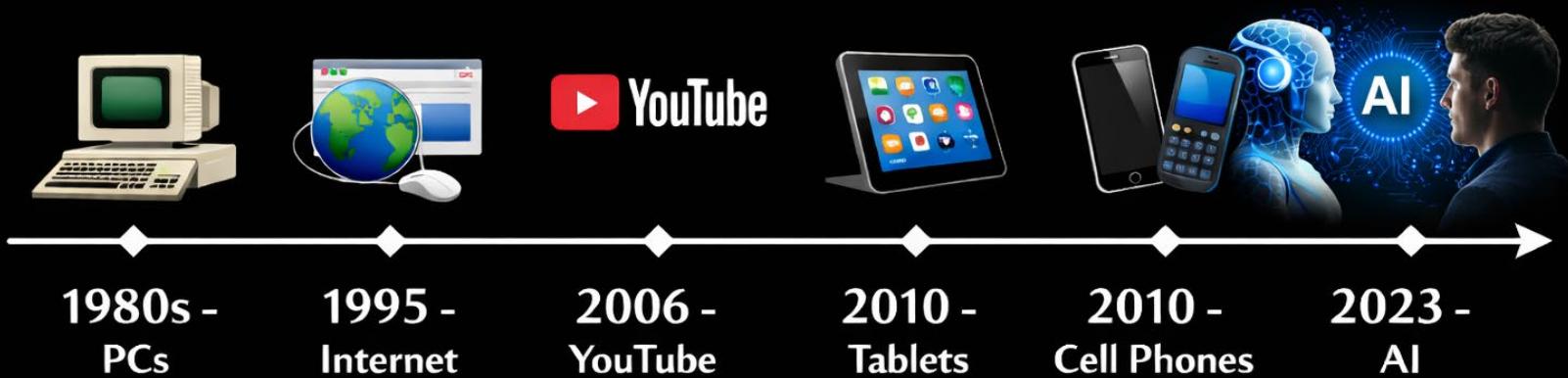
School of Computer Science & Information Systems



TRANSFORMING EDUCATION



Technology in the Classroom



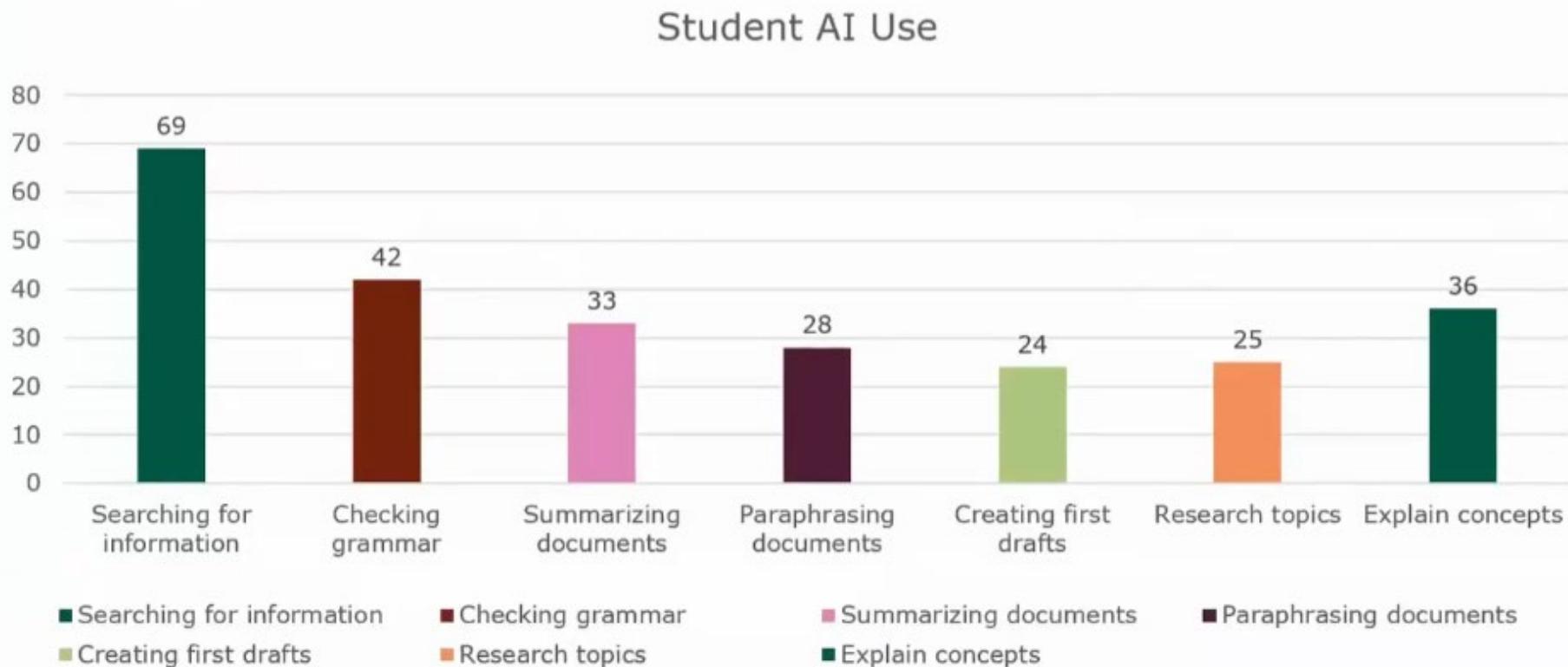
CAREER READY?



“What we call ‘cheating’, businesses call ‘progress’...91% of employers want employees with AI skills and 66% won’t hire someone without them.”

Bowen. J.A. (2025, Mar 12). *Teaching with AI: writing, cheating, detection, and policy* [Webinar]. Dakota Digital Academy. <https://dda.ndus.edu/teaching-and-thinking-with-ai/>

How Are Students Using AI?



STUDENT WELLBEING



- **Stressed they may be falsely accused of using AI**
- **Uncertain when AI is allowed**
- **Anxiety of resisting temptation of using AI**
- **False AI detection by AI detection tools**
- **Fear of:**
 - Academic integrity charges
 - Lost visas
 - National news

WHY DO THEY USE IT?



- **Lack of brain development**
 - Judgement
 - Impulse control
 - Long-term thinking
- **Academic pressures**
- **Balancing work life and academic demands**
- **Unclear or inconsistent messaging regarding use (Sourwine, 2025).**

Bloom's Taxonomy Revisited

Use this table as a reference for evaluating and considering changes to aligned course activities (or, where possible, learning outcomes) that emphasize distinctive human skills and/or integrate generative AI (GenAI) tools as a supplement to the learning process.

All course activities and assessments will benefit from ongoing review given the evolving capabilities of GenAI tools.

Version 2.0 (2024)



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		Distinctive Human Skills	How GenAI Can Supplement Learning*
CREATE	Engage in both creative and cognitive processes that leverage human lived experiences, social-emotional interactions, intuition, reflection, and judgment to formulate original solutions	Support brainstorming processes; suggest a range of alternatives; enumerate potential drawbacks and advantages; describe successful real-world cases; create a tangible deliverable based on human inputs	
EVALUATE	Engage in metacognitive reflection; holistically appraise ethical consequences of other courses of action; identify significance or situate within a full historical or disciplinary context	Identify pros and cons of various courses of action; develop and check against evaluation rubrics	
ANALYZE	Critically think and reason within the cognitive and affective domains; justify analysis in depth and with clarity	Compare and contrast data, infer trends and themes in a narrowly-defined context; compute; predict; interpret and relate to real-world problems, decisions, and choices	
APPLY	Operate, implement, conduct, execute, experiment, and test in the real world; apply human creativity and imagination to idea and solution development	Make use of a process, model, or method to solve a quantitative or qualitative inquiry; assist students in determining where they went wrong while solving a problem	
UNDERSTAND	Contextualize answers within emotional, moral, or ethical considerations; select relevant information; explain significance	Accurately describe a concept in different words; recognize a related example; translate to another language	
REMEMBER	Recall information in situations where technology is not readily accessible	Retrieve factual information; list possible answers; define a term; construct a basic chronology or timeline	

*AI capabilities derived with reference to an analysis of the MAGE framework, based on ChatGPT 4 as of October 2023. See Zaphir, L., Lodge, J. M., Liseć, J., McGrath, D., & Khosravi, H. (2024). How critically can an AI think? A framework for evaluating the quality of thinking of generative artificial intelligence. arXiv preprint arXiv:2406.14769.

Distinctive Human Skills

How GenAI Can Supplement Learning*

CREATE

Engage in both creative and cognitive processes that leverage human lived experiences, social-emotional interactions, intuition, reflection, and judgment to formulate original solutions

Support brainstorming processes; suggest a range of alternatives; enumerate potential drawbacks and advantages; describe successful real-world cases; create a tangible deliverable based on human inputs

EVALUATE

Engage in metacognitive reflection; holistically appraise ethical consequences of other courses of action; identify significance or situate within a full historical or disciplinary context

Identify pros and cons of various courses of action; develop and check against evaluation rubrics

ANALYZE

Critically think and reason within the cognitive and affective domains; justify analysis in depth and with clarity

Compare and contrast data, infer trends and themes in a narrowly-defined context; compute; predict; interpret and relate to real-world problems, decisions, and choices

Distinctive Human Skills

How GenAI Can Supplement Learning*

APPLY

Operate, implement, conduct, execute, experiment, and test in the real world; apply human creativity and imagination to idea and solution development

Make use of a process, model, or method to solve a quantitative or qualitative inquiry; assist students in determining where they went wrong while solving a problem

UNDERSTAND

Contextualize answers within emotional, moral, or ethical considerations; select relevant information; explain significance

Accurately describe a concept in different words; recognize a related example; translate to another language

REMEMBER

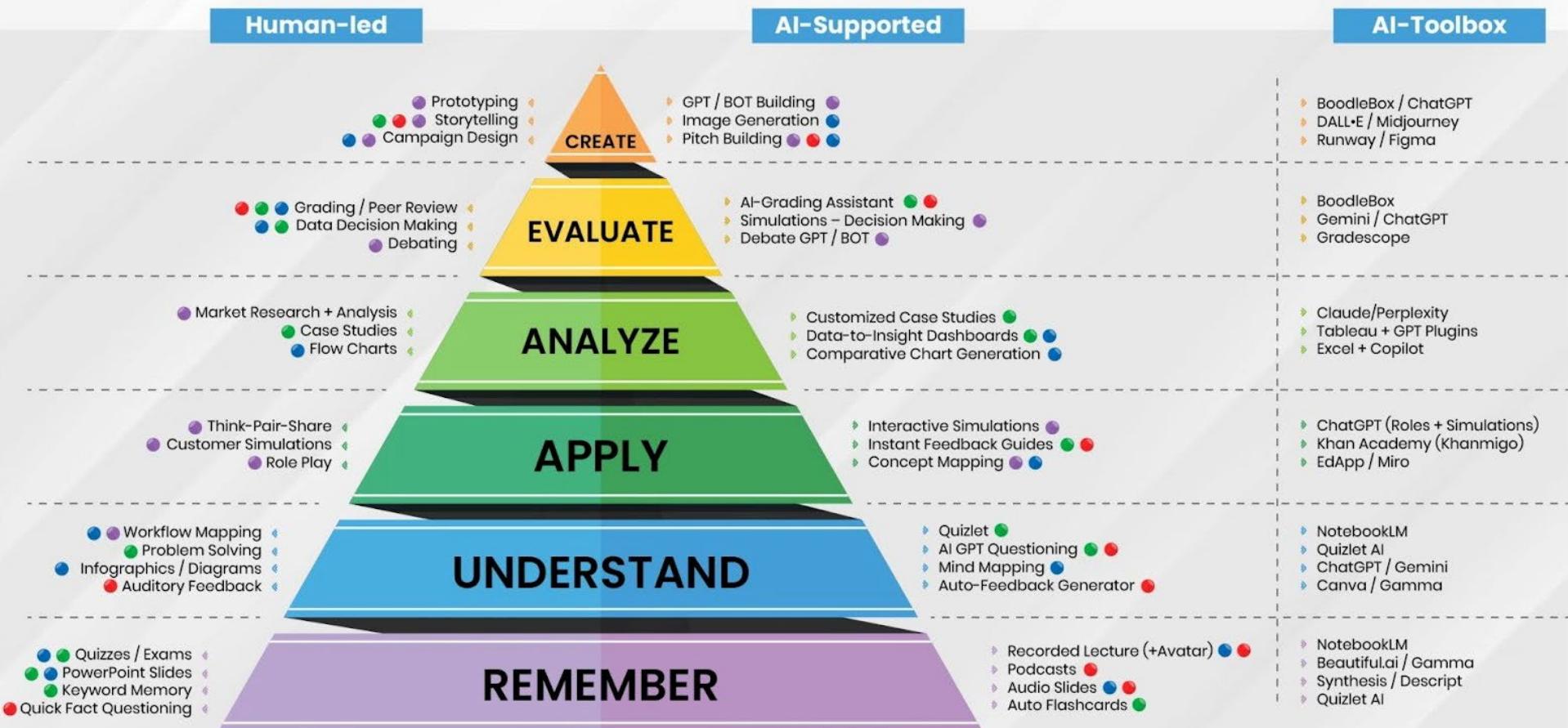
Recall information in situations where technology is not readily accessible

Retrieve factual information; list possible answers; define a term; construct a basic chronology or timeline

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THE BLOOM-AI FRAMEWORK

AI supports foundational knowledge; human educators develop higher-order cognitive skills.



VARK KEY

Visual

Auditory

Reading

Kinesthetic

GUIDELINES/GUARDRAILS



AI Assessment Scale Posters and Assignment Examples



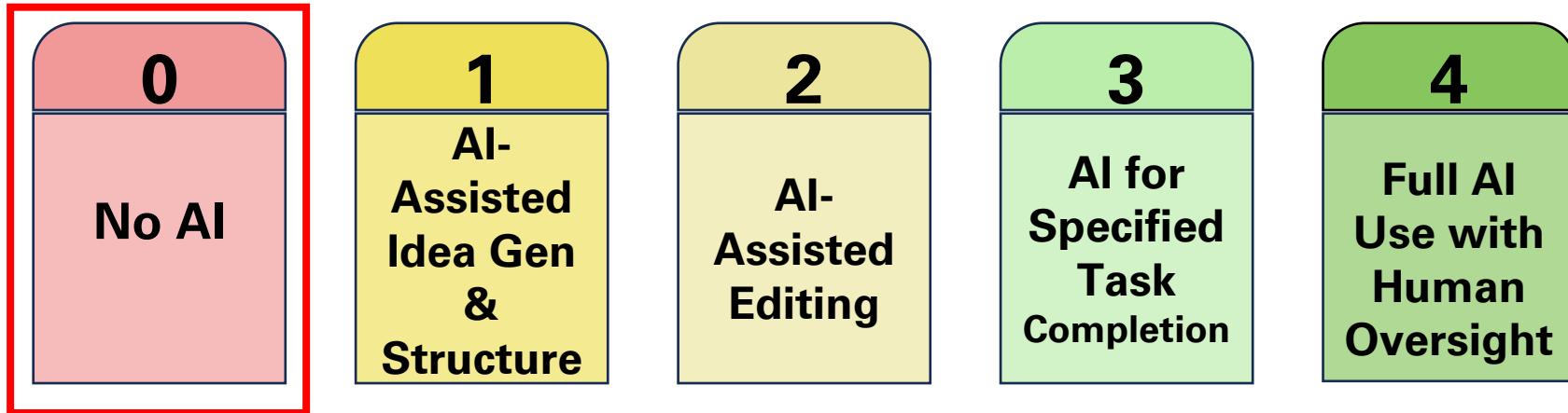
Can I Use AI on this Assignment?

Generative AI Acceptable Use Scale

Generative AI refers to any of the thousands of Artificial Intelligence tools in which the model generates new content (text, images, audio, video, code, etc)

This includes, but is not limited to, Large Language Models/LLMs such as ChatGPT, Google Gemini, etc, Image creators such as Dall-E3, Adobe Firefly, and any tools with built in generative AI capabilities such as Microsoft CoPilot, Google Duet, Canva, etc etc)

	Level of AI Use	Full Description	Disclosure Requirements
0	NO AI Use	This assessment is completed entirely without AI assistance. AI Must not be used at any point during the assessment. This level ensured that student rely solely on their own knowledge, understanding, and skills.	No AI disclosure required May require an academic honesty pledge that AI was not used.
1	AI-Assisted Idea Generation and Structuring	No AI content is allowed in the final submission. AI can be used in the assessment for brainstorming, creating structures, and generating ideas for improving work.	AI disclosure statement must be included disclosing how AI was used. Link(s) to AI chat(s) must be submitted with final submission.
2	AI-Assisted Editing	No new content can be created using AI. AI can be used to make improvements to the clarity or quality of student created work to improve the final output.	AI disclosure statement must be included disclosing how AI was used. Link(s) to AI chat(s) must be submitted with final submission.
3	AI for Specified Task Completion	AI is used to complete certain elements of the task, as specified by the teacher. This level requires critical engagement with AI generated content and evaluating its output. You are responsible for providing human oversight and evaluation of all AI generated content.	All AI created content must be cited using proper MLA or APA citation. Link(s) to AI chat(s) must be submitted with final submission.
4	Full AI Use with Human Oversight	You may use AI throughout your assessment to support your own work in any way you deem necessary. AI should be a 'co-pilot' to enhance human creativity. You are responsible for providing human oversight and evaluation of all AI generated content.	You must cite the use of AI using proper MLA or APA citation. Link(s) to AI chat(s) must be submitted with final submission.



Description:

- Completed entirely without AI assistance.
- AI Must not have been used at any point during the assessment.
- Ensures that students rely solely on their own knowledge, understanding, and skills.

Disclosure Requirements:

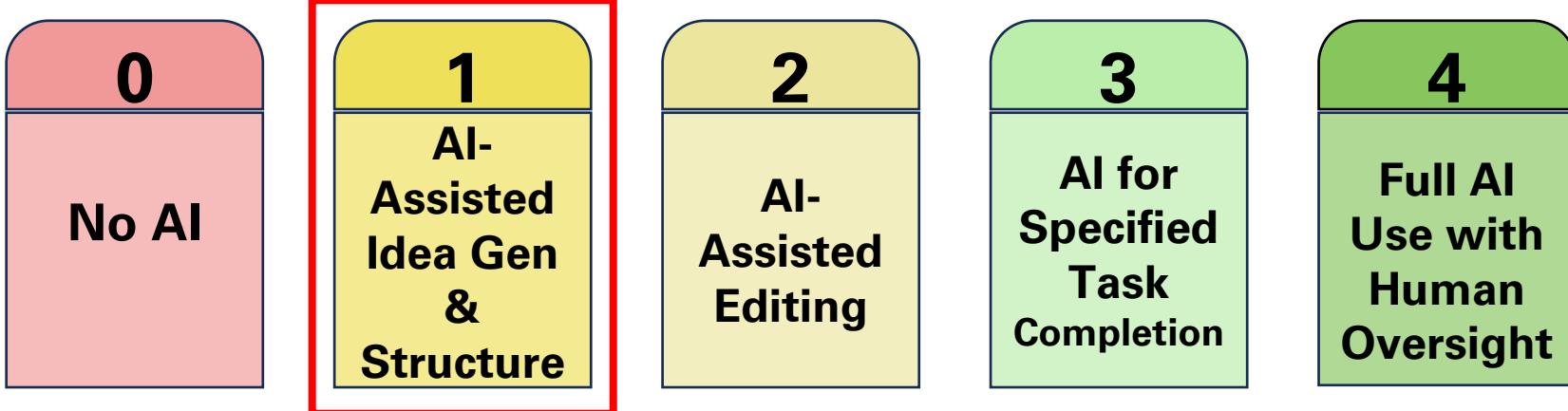
- No AI disclosure required
- May require an academic honesty pledge that AI was not used.

EXAMPLES OF LEVEL 0 ASSESSMENT TASKS



- **Mathematics:** solving equations and problems without the aid of any GenAI tools which might support with calculators or access to other devices
- **Literature:** the completion of draft writing by hand under supervised conditions
- **Computer Science:** the demonstration of theoretical knowledge through discussion

(Perkins et al., 2023)



Description:

- No AI content is used in the final submission.
- AI could be used in the assessment for brainstorming, creating structures, and generating ideas for improving work.

Disclosure Requirements:

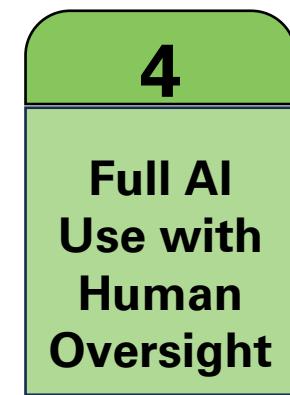
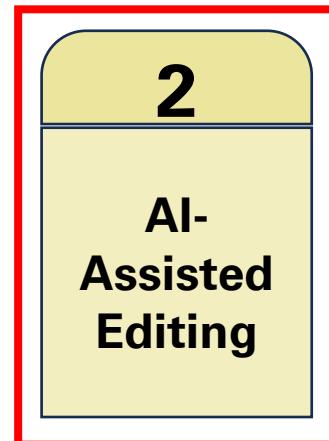
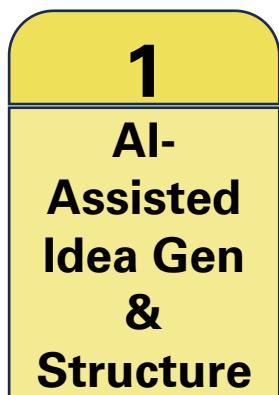
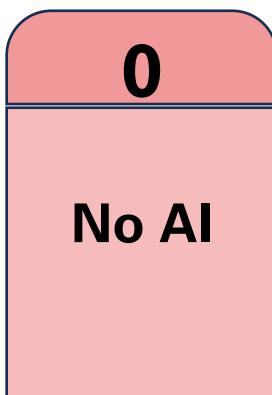
- AI disclosure statement must be included disclosing how AI was used.
- Link(s) to AI chat(s) must be submitted with final submission.

EXAMPLES OF LEVEL 1 ASSESSMENT TASKS



- **History:** Students could use GenAI to brainstorm potential topics for a research paper, then select one and complete the research without further AI assistance.
- **Arts and Design:** Students might employ GenAI, including image generation, to suggest themes or concepts for a project, but the actual design and execution must be done by the student.
- **Business Studies:** Students may use GenAI to generate business ideas or strategies, but the business plan and presentation must be developed without AI input.

(Perkins et al., 2023)



Description:

- No new content would be created using AI.
- AI could be used to make improvements to the clarity or quality of created work to improve the final output.

Disclosure Requirements:

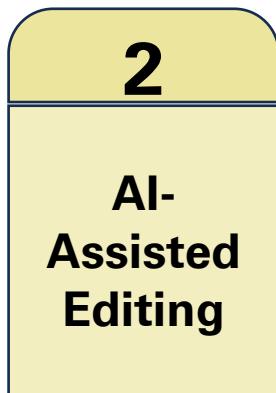
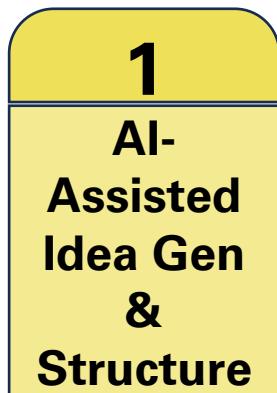
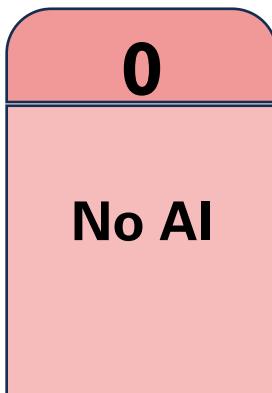
- AI disclosure statement must be included disclosing how AI was used.
- Link(s) to AI chat(s) must be submitted with final submission.

EXAMPLES OF LEVEL 2 ASSESSMENT TASKS



- **Social Sciences:** After drafting an essay on societal norms, students may use GenAI to refine the language and presentation, ensuring clarity.
- **Creative Writing:** After crafting a story or poem, students may use GenAI to polish the language, ensuring aspects such as flow and rhythm are consistent.
- **Graphic Design:** Students may use generative fill and expand tools to edit an original graphic or might use tools such as GenAI assisted remove/colorize/color swap.

(Perkins et al., 2023)



Description:

- Used to complete certain elements of the task, as specified by the teacher.
- Requires critical engagement with AI generated content and evaluating its output.
- Responsible for providing human oversight and evaluation of all AI generated content.

Disclosure Requirements:

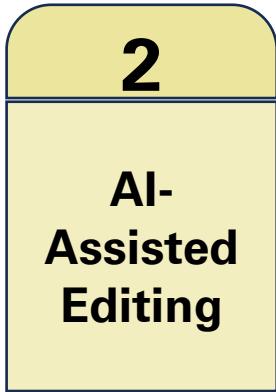
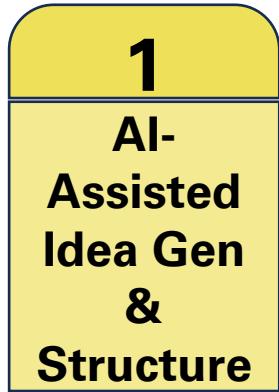
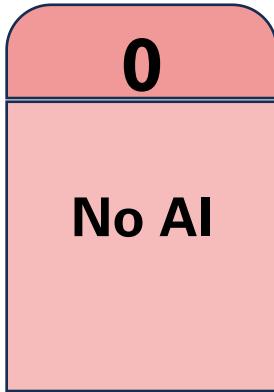
- All AI created content must be cited using proper APA citation.
- Link(s) to AI chat(s) must be submitted with final submission.

EXAMPLES OF LEVEL 3 ASSESSMENT TASKS



- **Art and Design:** Students use GenAI to generate artwork or design concepts, followed by a comprehensive critique of the generated piece, assessing its aesthetic, cultural, and technical aspects.
- **Data Science:** Students may use GenAI to generate data sets or simulate scenarios. They would need to evaluate the reliability, relevance, and potential biases in the AI-generated data.
- **Literature:** After using GenAI to generate a story or narrative, students provide an in-depth analysis of the plot structure, character development, and thematic elements, weighing them against traditional literary standards and cultural conventions.
- **Philosophy:** GenAI could be used to generate arguments or perspectives on a philosophical topic, with students critically dissecting the logic, coherence, and ethical implications of the AI model's position.

• (Perkins et al., 2023)



Description:

- May use AI throughout the assessment to support work in any way deemed necessary.
- AI should be a 'co-pilot' to enhance human creativity.
- Responsible for providing human oversight and evaluation of all AI generated content.

Disclosure Requirements:

- Must cite the use of AI using proper MLA or APA citation.
- Link(s) to AI chat(s) must be submitted with final submission.

EXAMPLES OF LEVEL 4 ASSESSMENT TASKS



- **Music Composition:** Students collaborate with GenAI to compose pieces, with tools suggesting melodies or instrumentations through audio generation applications and students refining them to align with their final vision.
- **Architectural Design:** Students might set design parameters or themes and then iterate on GenAI developed architectural concepts using image generation.
- **Multimedia Projects:** Students may work with GenAI on multimedia presentations, with students using a variety of multimodal GenAI tools throughout the process to create layouts, animations, or ideas.

(Perkins et al., 2023)

FINAL THOUGHTS



- **AI Assessment Scale Tool**
- **Clear guardrails**
- **Adapted as AI tools evolve**

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