Bloom's Taxonomy "Evaluate" Level and Generative AI

The proliferation of Generative Artificial Intelligence (GAI) tools is reshaping how the world approaches nearly every task, with changes likely to accelerate as these tools become more diverse and powerful. Rightfully, academics are questioning how to most productively deal with the changing technological landscape in higher education. Beyond worries about academic integrity and whether the work students submit is their own, there are legitimate questions about what learning is still foundational to the tasks required of humans in the workplace, and what would be better outsourced and automated. The following breakdown of GAI and Human Skills associated with Bloom's "Evaluate" level of learning, and possible means of both assessing student learning and incorporating GAI into assignments may provide insight into how to your course should change in the GAI era. Please remember that Microsoft Copilot in the Edge Browser is the only approved GAI tool on our campus.

Evaluate

In evaluation, one applies criteria to judge the value or appropriateness of anything that can be analyzed. It requires ethics, judgement, and contextualized understanding.

GAI does not do well at evaluation, since it is not good with ethics or understanding. Although it can produce something that "sounds" authoritative, it is limited to replicating forms. It doesn't evaluate well those things it was not trained on. It cannot actually "interpret" the value of various things, just as it cannot technically "understand" concepts.

Humans have the distinctive ability to combine context, ethics, and affective value with analysis allowing them to critique, justify, and evaluate authentic problems and potential responses. These judgements are important in evaluating the work of GAI in all contexts.

Action Words	Assessment Techniques and GAI Cheat Potential :1 (hard) -5 (easy)	GAI-Integrated Assignments
Appraise, Argue, Assess, Choose, Compare, Contrast, Critique, Decide, Defend, Evaluate, Interpret, Judge, Justify, Predict, Prioritize, Prove, Rank, Rate, Reframe, Select, Support, etc.	• **Debate**: Ask students to participate in a structured debate about the topic, demonstrating evaluation of different viewpoints and defense of their own understanding. GAI-Cheating Potential: 1. Debates occur in real-time, and require evaluation of nuances and contextual understanding that GAI cannot assist with. • **Peer Review**. Students evaluate and provide feedback on each other's work. This not only assessed their understanding but also their ability to apply the evaluation criteria. GAI-Cheating Potential: 2. GAI could potentially provide feedback and apply a rubric, but it would lack contextual understanding of the specific assignment. • **Critical Essays**. Students can write essays requiring them to critique a theory, concept, or argument related to the course. GAI-Cheating Potential: 3. GAI could help in writing a coherent essay, but would not be able to apply critical thinking about specific course material or deep understanding, especially when there are nuances involved. • **Self- Evaluation Reports**. Student could write a self-evaluation report, reflecting on their own learning progress. GAI-Cheating Potential: 2.5. Although AI can generate reflective content, it will not accurately reflect the students' learning journey. It will lack the nuance and personal touch that self-produced reflections have.	• **AI-Assisted Literature Critique**: Students use AI to generate a summary of a piece of literature, then critically evaluate the summary's accuracy and depth compared to the original text. • **Data Interpretation with GAI**: Students input raw data into an GAI tool to generate interpretations and visualizations, then evaluate the GAI's analysis for accuracy and potential biases. • **GAI Content Review**: Students review and evaluate content created by GAI use in various industries and evaluate the ethical implications and societal impacts. • **GAI Debate Preparation**: Students use GAI to help prepare for a debate, evaluating the strength of GAI-generated arguments and evidence for their side of the issue. The actual debate could also happen without the use of GAI.

References and Reading

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