Revising Your Assignments: Elevating Student Learning through the Use of GAI.

This approach focuses on raising the expectations for student performance so that GAI could not pass your course. The focus of student learning is therefore at more complex and integrative forms of learning, especially those at which GAI does not excel, including the application, evaluation, and creation levels of Bloom's Taxonomy. Rather than simply partnering with students to learn, in this approach, faculty lead their students to the forefront of learners seeking to leverage GAI tools to achieve and surpass their educational and professional goals. This guide offers considerations and suggested exercises for elevating student learning with GAI.

Assignment Considerations

1. **Recalibrate learning outcomes:** Consider what learning you will require of students. Higher levels of learning complexity, such as application, evaluation, and creation in which various forms of learning are integrated in novel ways are the levels of Bloom's Taxonomy at which GAI is least proficient. Emphasizing these skills allows students to focus on improving the outputs of GAI.

2. **Recalibrate grading:** Those who get and keep the jobs of the future will be those who can do better with GAI than GAI or the individual can do alone. There will no longer be a place for "C" work since this is within the capabilities of GAI. Consider recalibrating rubrics so that GAI alone would not be able to pass your course.

3. **TILT**: Transparency in Learning and Teaching goes a long way toward increasing student valuation of assignments. The more students value assignments, the less likely they are to take shortcuts or cheat. Making it clear in the assignment introduction what the **purpose** of the assignment is, **what students will gain** (knowledge/skills) from completing the assignment, and **how the assignment will prepare students** for careers or future coursework, provides the context students need to invest time and effort in the assignment. You should also be clear, in advance, **how you intend to evaluate the assignment**, with explicit guidelines, expectations, and scoring criteria or a detailed rubric. Be explicit about how you want students to use GAI, and what records of their GAI use they should keep. Consistently using the TILT framework will help your students to better define the target they are attempting to hit, which can provide them with more confidence in their ability to complete the assignment. You can download teaching tools for making your assignments more transparent from Tilt Higher Ed.

Ways to use GAI to elevate and enhance student learning:

1. **In-class GAI-enhanced activities:**
   - **Interactive text analysis**: Use GAI tools to perform interactive textual analysis, facilitating students' understanding of complex themes, motifs, or patterns of meaning. (Take care not to violate the intellectual property rights of authors.)
   - **Simulation**: GAI-enhanced simulations can be used to provide hands-on experiences in understanding complex principles.
   - **Language learning**: GAI-powered apps can provide real-time feedback to students to improve pronunciation and can create opportunities for authentic dialogue tailored to individual student's interests, needs, and level in language classes.

2. **Out-of-class GAI-assisted activities:**
   - **Personalized tutoring:** GAI-powered tutoring systems can provide personalized assistance during independent study sessions, adapting to each student's unique learning style and pace. Provide students with some starting prompts to facilitate their investigation, and ensure that the GAI tool is acting in a Socratic manner.
   - **Role-playing/Debate Partner**: Ask the GAI to play a specific role in interacting with a student. This can be a great way to explore diverse ideas, and clarify understanding, and practice making arguments with a partner who will counter-arguments from a specific vantage.
   - **Efficient research:** GAI tools can help students conduct research more efficiently by automatically filtering and summarizing relevant academic articles, data, and information.

3. **GAI-enhanced assignments and projects:**
   - **Generating business or clinical reports:** Formulaic writing is required in many applied disciplines, and already GAI-applications are being used in the workplace to produce these. Giving practice to students using GAI to compose basic reports, so that they develop skills that allow them to improve upon these basic outputs will enhance career readiness.
   - **GAI brainstorming:** Often the first steps of a project are the most difficult for people to take since proposing ideas can make them feel vulnerable. GAI doesn't have an ego and is unabashed in throwing ideas into the mix. Working with GAI to generate possible ideas for projects or studies can help students to overcome initial blocks, and devote more effort to exploring the ideas they land on.
   - **GAI polishing:** Using GAI to polish language in papers and projects frees students to think more about their content, arguments, and analyses. It will also ensure that the instructor can take for granted that the grammar and spelling in a paper will be perfect or nearly so, facilitating reading, and eliminating the need to give points for what should be standard.
   - **Creative fusion**: Students can use GAI to create art, generate music, or collaboratively write stories, promoting an intersection of creativity and technology. This can be leveraged in a number of classes to personalize HOW students demonstrate their learning, making projects more fun and engaging.
   - **Data analysis**: Students can use GAI tools to analyze large datasets, testing hypothesized relationships and effects, and drawing correlations between various global events.

Adapted from Teaching with Artificial Intelligence, Presented by the Biggio Center for the Enhancement of Teaching & Learning at Auburn University, Module 5: Elevate Student Use of AI.

If you are interested in taking this course, visit the CITL website.

References and Resources:

Biggio Center for Enhancement of Teaching & Learning at Auburn University Teaching with Artificial Intelligence, Module 5 Support Student Use of AI. UWSP Faculty. Enroll in this course through CITL.

Bowen. AJ. And C.E. Watson, (2024) *Teaching with AI: A Practical Guide to a New Era of Human Learning.* Johns Hopkins University Press, *Baltimore.*

Cengage, (2023) 8 Ways to Prevent Students From Cheating With AI

Kelly, K.J. 2023. Teaching Actual Student Writing in an AI World, Inside Higher Education, January 18, 2023.

Khan, Sal. (2023). TED Talk How AI Could Save (Not Destroy) Education

McDonald, N., Johri, A., Ali, A., & Hingle, A. (2024). *Generative artificial intelligence in higher education: Evidence from an analysis of institutional policies and guidelines* (arXiv:2402.01659). arXiv.