DREXEL UNIVERSITY
Teaching and Learning Center

STEP ONE: Understand "GAI"

What is the "Generative" in "Generative Artificial Intelligence"?

GAI tools generate new content (text, images, code, etc.) by analyzing patterns from large datasets and using them to predict the most likely answer to a prompt. Their outputs are generated through mathematical calculations without ethical judgement, emotional engagement, cultural awareness, creative imagination, or understanding.

- ☐ Do I know that GAI tools generate outputs by performing mathematical calculations without reasoning, judgement, or understanding?
- ☐ Do I understand that GAI outputs reflect their training data sets, including inaccuracies and biases?
- ☐ Am I giving too much creative or intellectual control to a tool that cannot reason or feel?

How is asking a chatbot different from using a search engine?

Search engines (like Google) retrieve, rank, and link sources from the web for users to choose from. Chatbots generate the most statistically probable (not necessarily the best or correct) answer to a query based on patterns they have analyzed.

- ☐ Is this a task for a chatbot or will a different tool be better?
- ☐ What am I missing by not being able to trace information to its original source?
- ☐ Am I able to assess the AI-generated answer for accuracy and bias?

Who creates GAI tools and for what purposes?

GAI tools are developed by for-profit companies whose goals might not align with yours. The GAI industry is largely unregulated and depends heavily on the under-compensated work of humans who created the content used in training and who continue to refine models by tagging offensive content.

- ☐ Who made the GAI tool and for what purpose?
- ☐ How might the creators' commercial interests and goals shape the tool's design or outputs?
- ☐ What labor and copyright issues should I consider when using GAI?

STEP TWO: Think critically about how GAI affects your learning

Will using GAI help or hinder my learning?

When deciding whether and how to use GAI tools for academic or professional tasks, think about the goal of the assignment first, and then decide whether or not GAI can help you reach that goal. Using GAI too early or too often can prevent you from developing key academic or professional skills like writing, coding, or critical thinking.

- ☐ Is this tool helping me learn or just helping me complete the assignment?
- ☐ What specific cognitive tasks am I outsourcing and why?
- ☐ What important skills would I be developing or strengthening if I did this task myself? What skills would I be developing if I used GAI?

Can I trust GAI outputs?

GAI tools can produce inaccurate outputs that appear reliable to a non-expert user. GAI can also

replicate stereotypes and biases, amplify over-represented points of view, and omit under-represented ones. You are responsible for fact-checking and thinking critically about any GAI outputs used in your work.

- ☐ Am I accepting GAI answers without questioning them?
- ☐ Do I have the expertise to assess GAI outputs?
- ☐ What stereotypes might be masquerading as facts? Whose perspectives might be overrepresented, underrepresented, or missing from this output?

What are the hidden costs of GAI?

GAI tools require large amounts of energy and computing power, which contributes to serious environmental strain, including increased carbon emissions and water consumption. Using GAI tools also raises data privacy concerns, as companies may store and analyze personal, sensitive, or copyrighted information.

- ☐ Is using GAI for this task worth the environmental cost?
- ☐ Do I know what this tool does with my data?
- ☐ Am I sharing someone else's intellectual property without their consent?

STEP THREE: Take full responsibility

You are the author

GAI tools can support your academic work, but you are ultimately responsible for the form and content of your submissions. Make sure you are able to assess the quality of GAI outputs and revise them to meet required standards.

- ☐ Am I taking full ownership of the work I'm submitting?
- ☐ Am I able to ensure my work is informed, fair, and accurate?
- ☐ Am I developing the skills I need to assess AI-generated work?

Know the rules

Different courses have different rules about GAI use: some allow it, some prohibit or restrict it, and some have individual rules for individual assignments. It's your responsibility to understand and follow your instructor's expectations, and to document GAI use when required.

- ☐ Do I understand the GAI guidelines for this course and/or assignment, including the *how* and the *why*?
- ☐ Have I documented my use of GAI clearly when required?
- ☐ Am I being honest about the role GAI played in my work?

Think (and talk) about it

Nobody knows how exactly GAI will change the way we learn and work. It's important to stay curious, resist the hype, and think critically about how GAI is transforming your work and world.

- ☐ How is GAI shaping my academic habits?
- ☐ How is GAI shaping the way I think, feel, and interact with others?
- ☐ Am I thinking about what it means to be an informed and ethical user of GAI in my field?