

SJCC Faculty Academic Senate Generative Al Committee Generative Al Guide - Fall 2024

Note: this is a living document and is subject to change – approved by the Academic Senate (10/15/24)

Top 10 Recommendations for All Disciplines:

- 1. Learn about AI: AI in a Nutshell (18-minute video): https://www.youtube.com/watch?v=2IK3DFHRFfw
- 2. **Highlight Al's Limitations and Risks**: educate students about the limitations of Generative Al in understanding the complexities of natural systems, the need for critical thinking, human understanding, empathy, and context.
- **3. Balance AI with Human Insight:** explain the difference between human **wisdom** and A.I. **knowledge**/information.
- **4. Promote Critical Thinking with AI**: foster a classroom culture that values curiosity, skepticism, and the rigorous application of scientific methods or critical thinking skills. Tell students their future work will require them to be able to think critically and relying solely on artificial intelligence may end up harming you in the future.
- 5. Communicate Expectations about Al Use Clearly in your syllabus and in your introductory modules/first day of class. Clearly communicate requirements for each assignment. Review the sample Sample Syllabus Language and customize it for your class.
- **Revise your curriculum and policies for the Age of the AI**: Review the weights and calculations in your gradebook and course, so that high scores on quizzes and other easily automated assessments, in total, don't prevent you from assessing student knowledge. Weigh authentic assessments higher. Protect student privacy when assigning the use of AI tools.
- **7. Teach Ethical Use of AI**: reframe instances of misuse of AI into teachable moments, using suggestions below, especially for one-time/first instances.
- 8. Frame Misuse of AI with Real-Life Consequences: emphasize that students cheat themselves and devalue their degrees if they misuse AI. Generative AI often "hallucinates" and may produce inaccurate results. Make sure they know that they must verify any outputs, citations, statements, etc. for accuracy.
- 9. Model Transparent Use of AI by Generating Course Content: consider using Generative AI to develop new, less easily automated course content and stating on your syllabus: "This course contains content generated in collaboration with the AI Tools Claude.AI and ChatGPT, etc." to model best practices and to signal to your students that they can talk with you about their generative AI use.
- **10. Pace Yourself**: don't use or assign generative AI yourself if you don't have enough time and expertise to check the outputs and verify them for validity and accuracy.

Roles of Generative AI in Education:

- Tool for productivity, diversifying learning experiences, collaboration, simulation
- Mentor/Coach, Peer Collaborator
- · Course Assistant 24/7 Tutor (if trained on your OER Textbook, for example)

Best Use Examples of AI by Students

- Citing ChatGPT as a collaborator using the <u>MLA Guidelines</u> or <u>APA Guidelines</u>
- Using A.I. Tools such as <u>Goalmentor</u> (https://goalmentor.app/) to break their term papers down into steps
- Listen to the week's readings as an audiobook using <u>Speechify</u> (https://speechify.com/)
- Brainstorming ideas for a topic on <u>Ideamap</u> (https://ideamap.ai/)
- Proofreading a paper for tone or typos using <u>Grammarly</u> (non-ESL class) <u>https://www.grammarly.com/</u>

Samples of Inappropriate Use of AI

- Copying and pasting of an entire essay for a writing class and claiming they wrote it
- · Feeding equations to solve into generative A.I. for a digital multiple-choice test

Suggested Responses to Detected AI Content

- Short term (hybrid or in-person classes): consider giving your assessment in person in a computer lab. Contact < Lisa.little@sicc.edu or your Division Office to book.
- Short term (online asynchronous): Considering Proctoring options such as Respondus (keep in mind options for video being on for students who have accommodations).
- Long term: use AI to replace multiple choice assessments and other, more easily automated assignments with human-centered course content for next term (see suggestions below)
- Ask the student.
- If they deny it, keep in mind there is no way to prove them wrong.
- If they admit that their use was inappropriate, reframe your approach into an opportunity to teach them
 about the best way to use generative A.I. in education.
- Require them to complete the new <u>SJCC AI Literacy Tutorial</u> (https://sjeccd.instructure.com/enroll/LT69WW) and pass the Quiz on Canvas before you accept a rewrite.
- Assure students that you are on their side and that you want to set them up to succeed in the future by
 making sure that they have these knowledge and skills for how to use AI responsibly, especially if this
 is the first time you detect it in their assignments.
- Consider requesting a live assessment of their skills (or a pre-recorded video of their composition process, for example, for asynchronous students).

Types of Authentic Assessments

Project-Based Learning (PBL): Assign projects that span several weeks, requiring research, collaboration, and presentation.

Portfolios: Have students compile a portfolio of their work over the course of a semester to demonstrate their learning progress and accomplishments.

Case Studies: Use real or simulated case studies relevant to the field of study.

Simulations and Role-Playing: Incorporate simulations or role-playing activities that mimic real-life scenarios.

Service Learning: Integrate community service projects that align with course objectives.

Reflective Journals: Ask students to maintain journals reflecting on their learning experiences and growth.

Examples of Authentic Assessments

STEM Fields: Design lab experiments or research projects that solve real-world problems.

Humanities: Develop projects such as writing a book review for a public audience or creating a multimedia presentation on a historical event.

Social Sciences: Have students create policy proposals, conduct surveys, or engage in community-based research.

Business: Simulate business scenarios where students must develop a business plan, conduct market research, or analyze financial data.

Human-centered Course Content Examples by Discipline

- For Biology, Chemistry, and Physics
 (https://sjeccd.sharepoint.com/sites/SJCCAcademicSenate/GenAlCommittee/_layouts/15/doc.aspx?sourcedoc=%7b8237cf57-8dc9-48a0-a6c0-ac917410d7cb%7d&action=edit)
- For Mathematics and Computer Science (https://sjeccdmy.sharepoint.com/:w:/g/personal/susan_hickok_sjcc_edu/ERsF7kXqCLZHoqPOtCcEJLwB13 zKW4MMeb_E5SRvSNAu0A?e=6MCW9q)

- For Language Arts (https://sjeccdmy.sharepoint.com/:w:/g/personal/susan_hickok_sjcc_edu/EewcUd2-1jlDn9a6jslgwl4BppKIWAksRe0lzC1cUQ0bSA?e=ufj1Tm)
- For Arts, Humanities, and Social Sciences (https://sjeccd-my.sharepoint.com/:w:/g/personal/susan_hickok_sjcc_edu/EYuOqkn1GxNIpzeMQn2q7wcBO N1s6XnuR7PA0wdQCOILLQ?e=nyWGAE)

Special Areas of Concern:

The AI Committee recognizes that there is still much more work to be done in terms of the role of generative AI in education and agrees that these areas of special concern need to be addressed and that this is a living document in need of constant revision:

- Equity & Access: full utilization of generative AI often requires a paid account, and, as such, presents
 barriers to access for underserved and unrepresented students. At the same time, there is a potential to
 level the playing field for students who might not otherwise be able to afford a coach, tutor, translator, or
 other accessibility services.
- Bias: many generative AI tools are trained on bias, racist, and otherwise offensive content, and so their
 outputs may contain harmful outputs. In not every case does is the owning company able to explain the
 outputs of its own tool. This situation has problematic implications for accountability with this yet
 completely unregulated technology.
- Privacy & Collection of data the data that is fed into generative AI should not be assumed to be
 private in any way. Do not recommend/require that students enter any personal, identifying, or sensitive
 data into any generative AI system. Many systems require accounts, even for free use, and instructor
 please use extreme caution with these tools. Consider using an anonymous alternative such as
 Perplexity.ai.
- Ownership/copyright of data outputs and training sets. Many of the decisions regarding ownership of data and copyright are still being decided by courts of law. What we know so far, is that Generative AI is not recognized as an author who can register copyright for its output. General guidance is to recognize and cite its outputs as a collaborator. See the professional standards from your discipline's flagship body, such as APA or MLA for proper citation guidance. In addition, the legality of the training sets used in the creation of generative AI has been called into question in some legal cases and may be impacted by several ongoing court cases. It's still unclear in the eyes of the law if the training sets in use have been used properly or improperly and what will be done about it.

Al Tools Comparison*

Here is a limited list of tools you may wish to consider, depending on your course content:

Writing and Research:

Grammarly: Grammar and style checker. (https://grammarly.com)

Learning and Assessment:

WolframAlpha: Produces outputs and models for scientific formulas and more. Anonymous.

(https://www.wolframalpha.com/)

Questgen: Creates quizzes from PDF notes, images, or websites (2) runs for free only

(https://www.questgen.ai/)

Accessibility and Support:

NaturalReader: Text-to-speech tool for converting written text into audio. Anonymous

(https://www.naturalreaders.com/)

Otter.ai: Provides speech-to-text transcription. (https://otter.ai/)

Amazon Polly: Text-to-speech service with various voices and languages. Anonymous

(https://aws.amazon.com/polly/)

Content Creation and Assistance:

Copilot: Accesses DAL-E for images to create flyers. (https://adoption.microsoft.com/en-us/copilot/)

Gemini: Processes content directly from YouTube videos and Google. (https://gemini.google.com)

Perplexity.ai: Answers both research and conversational queries. Anonymous.

(https://www.perplexity.ai/)

Claude.ai: Designed for educational and research-based inquiries. (https://claude.ai/)

PolitePost.net: Rewrites your emails to be professional and polite. Anonymous. (https://politepost.net/)

ChatGPT: Chatbot for engaging in conversations and automating tasks. (https://chatgpt.com/) **Khanmigo:**

Create lesson plans, letters of rec, assessments, and more. (https://www.khanmigo.ai/)

*account required unless otherwise noted, as of 5/20/24.

Works Cited

"Can you please summarize this www.lamar.edu/lu-online/files/documents/blog/ai-faculty-

guide.pdf.]? As I think I've mentioned before, I'm a faculty member at San Jose City College, and I'd like to present the findings and suggestions to my colleagues at our next professional development day. (uploaded ai-faculty-guide.pdf) Are there suggestions for my colleagues in mathematics and computer science? I have personally found those to be the most difficult to come up with ideas to prevent cheating. Thanks -- what about for my colleagues in English?OK -- how about for Social Sciences? OK, how about Chemistry, Biology, and Physics (physical

and biological sciences)?" prompts. *Claude.ai*, Claude 3 Opus, Anthropic, 26 April 2024, https://claude.ai/chat

Dockens, Ashley, PhD, AuD, CCC-A. and Center for Teaching and Learning Enhancement at Lamar University. "Promoting Authenticity of Student Work in the Age of Artificial Intelligence: A Faculty Guide." *Center for Teaching and Learning Enhancement at Lamar University*, 2023, p. 2. www.lamar.edu/lu-online/ files/documents/blog/ai-faculty-guide.pdf.

Further Reading

Bibliography: Navigating the Future of Open Education with Generative Al

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Resources Related to Generative AI for CCL Libraries

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