ACADEMIC SENATE FOR CALIFORNIA COMMUNITY COLLEGES

Academic Integrity Policies in the Age of Artificial Intelligence (AI) Resource Document

Spring 2024

Offered and Curated by the ASCCC Educational Polices Committee 2023-2024

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PURPOSE FOR THE RESOURCE

During the spring 2023 ASCCC plenary session, Resolution 13.05[1] titled, "Considering the Merits and Faults of Artificial Intelligence in the Community College Classroom" was adopted. This resolution held the following resolved statement:

> *Resolved, That the Academic Senate for the California Community colleges prioritize the development of resources addressing artificial intelligence and its implications on education and academic integrity, develop a framework for local colleges to use in developing academic and professional policies, and present these resources no later than the 2024 Spring Plenary Session or as soon as feasible.*

In response to this direction, the ASCCC further engaged with our system partners including the California Community Colleges Chancellor's Office (CCCCO) and the Faculty Association of California Community Colleges (FACCC). One example of these collaboration includes the 4-part webinar series on Generative AI in Higher Education during 2023-2024 that showcased various emerging technologies, AI tools, and additional consideration of impact to equity and diversity efforts.

The webinar series included the following presentations:

- Introduction to Generative AI (September 25, 2023)
- Generative AI as a Tool for Teaching and Learning (November 7, 2023)
- Generative AI as a General Productivity Booster (February 27, 2024)
- AI-Enhanced Analytics and Learning Platforms (May 7, 2024)

Recordings from the completed webinars are available on the CCCCO's Vision Resource Center.

In tandem with these collaborations, other AI related research and examination is being moved by other ASCCC Standing Committees (such as the ASCCC Educational Policies Committee, ASCCC Online Education Committee, and our ASCCC CTE Leadership Committee). ASCCC continues to engage in these conversations and will continue to do so as we all learn together.

Additionally, a new roadmap for California Community Colleges titled "Vision 2030"[2] was introduced by the CCCCO. According to the CCCCO website, "Vision 2030 is a collaborative action plan that provides focus, equity, and direction to our community colleges." The framework of "Vision 2030" has been shared during multiple events (including the Fall 2023 ASCCC Plenary). One of the "Strategic Directions" of this plan focuses on Artificial Intelligence (AI) and implications for higher education.

To answer the call from the adopted ASCCC resolution, the ASCCC Educational Policies Committee was tasked with exploring and recommending a possible framework and/or guiding principles that faculty and local academic senates could use within their collegial consultation processes to support any desired revisions to academic and professional policies as they relate to artificial intelligence and academic integrity.

We recognize that the development of AI and its impact on our system is growing exponentially. Even so, we must not lose sight of our mission to serve our students and communities, while attempting to catch "a moving target." This work can be overwhelming, as the degree and rate of change facing our system may cause various levels of discomfort. We encourage the user of this resource document to adopt a growth mindset and enter this work with cautious optimism.

The influence of AI on academic and professional matters underscores the responsibility and expectation of academic senates to assume responsibility for making recommendations, especially if there is potential impact on curriculum and academic standards. Additionally, under the "10+1", items of academic and professional matters also specifically indicate "standards and policies" or "policies" while others indicate faculty roles in "processes". The infusion of AI in our work supporting student success will affect our policies and processes and in turn demands academic senate involvement.

As the use of AI has increased in popularity and holds levels of application curiosity (not only for our students but for faculty and others), a mindful development of explicit allowable uses will need to be communicated with appropriate professional learning to support ethical and efficient uses of various AI tools. The ASCCC is seeing a

[1] https://www.asccc.org/resolutions/considering-merits-and-faults-artificial-intelligence-community-college-classroom

[2] https://www.cccco.edu/About-Us/Vision-2030

dramatic increase in faculty interest in AI with proposals for a new discipline recognition for Artificial Intelligence, responding to local industry demands, and many requests for resources.

In preparation for the following resources, the ASCCC offered a breakout session during the Fall 2023 plenary, seeking input from plenary attendees. Participants shared their questions, perceptions, suggestions, and specific policy needs as it relates to artificial intelligence. Next, members of the ASCCC Educational Policies Committee supplemented this feedback with additional broad research and reached out to various local senate presidents, some of our CIO partners, and colleagues to help curate this initial resource.

In summary, this document is (and will continue to be) "a work in progress" due to the transformational nature of artificial intelligence. It is impossible for one document to serve as the answer to all questions around AI. However, as ASCCC continues to partner with our system colleagues, input from local academic senates, and other experts, a breadth of additional resources will continue to emerge in various ways. It is through these collaborations that we can find synergy in this work. We look forward to those continued opportunities to work as a community and, as always, supporting the faculty voice in policy considerations as it relates to student preparation and success.

This resource document will acknowledge some general considerations, offer suggested guiding principles (or philosophy in AI policy creation), sample syllabi language to address academic integrity as relating to AI, some suggested reading for algorithmic justice, and an initial glossary.

GENERAL CONSIDERATIONS

Some general considerations beyond policy development will include prioritizing the impact on student equity, setting expectations, and ongoing professional learning for faculty and others as it relates to AI. Artificial intelligence has already been used to increase accessibility with features such as text-to-speech, captioning, and keyboard navigation. However, some tools come with a cost. Therefore, be mindful of any paywalls that may limit access, and consider alternatives if using expensive AI tools.

Guiding students in the use of AI may also pose a challenge and require intentional effort. For students to be successful and ethical in the use of AI, expectations need to be clear. We must help students understand the appropriate use, limitations, biases, and effective techniques of using AI efficiently. This may include teaching how to craft sophisticated prompts, outlining potential errors, and the appropriate application. In this partnership with our students, instructor oversight will be necessary to help review for appropriateness and ensure appropriate tone and terminology.[3]

SUGGESTED GUIDING PRINCIPLES/PHILOSOPHY IN AI POLICY CREATION

Crafting principles to help guide potential policies for the ethical and effective use of Artificial Intelligence (AI) in the California Community College System is crucial. In brief, policies involving AI should have 1) ethical considerations, 2) be legal and in compliance, 3) widely communicated and transparent, 4) provides accountability and oversight of the use of AI, and 5) support with professional learning, training, and education. Below is a list of synthesized suggested policy elements for faculty, academic senates, and others to guide conversations during the collegial consultation process with our administrative partners. This list is not exhaustive and provided as a prompt to help promote engaged dialogue for various AI applications in higher education.

[3] Some suggestions provided during Vision 2030: Generative AI in Higher Education webinar co-facilitated by CCCCO, ASCCC and FACCC Nov 7, 2023 (May require logging into the CCCCO VRC prior to attempting to open)

1. **What are some of the ways to infuse *Ethical Considerations* within AI policies?**
   - Ensuring alignment with institutional ethical guidance and commitment.
   - Promoting equity, transparency, accountability, accessibility, and inclusivity.
   - Recognizing biases in AI algorithms and decision-making processes.
   - Prioritizing the protection of personal data and privacy rights.
   - Considering the potential impact on underrepresented groups and working to mitigate disparities.
   - Promoting algorithmic justice and combating discrimination.
   - Acknowledge or prioritize the utilization of widely accepted AI tools to prevent exacerbation of equity and access gaps.
2. **What are some of the *Legal and Compliance Obligations* to consider as an organization?**
   - Ensuring compliance with relevant laws and regulations pertaining to AI and data protection.
   - Obtaining student consent for data usage and allowing opt-outs.
   - Adhering to FERPA regulations and limiting data collection to what is necessary.
   - Anonymizing student data used for AI model training when possible.
3. **What can we do to promote *Transparency and Communication* about AI policies?**
   - Require transparency in the development and deployment of AI systems, making information about the algorithms and data used accessible to relevant stakeholders.
   - Encourage openness in communicating the purposes, outcomes, and potential impacts of AI applications in the academic environment.
   - Promote algorithmic transparency while protecting student privacy and IP.
   - Make AI policies easily accessible to all stakeholders.
   - Provide broad communication when policies are revised or established.
4. **What are some ways to ensure *Accountability and Oversight*?**
   - Establish clear lines of accountability for AI systems, specifying roles and responsibilities of individuals involved in the development, deployment, and oversight of AI applications.
   - Implement mechanisms for addressing and rectifying unintended consequences or errors in AI systems.
   - Establish a robust governance structure for overseeing the use of AI, including regular evaluations of AI policies, systems' effectiveness, fairness, and impact.
   - Foster collaboration with external experts, ethicists, and stakeholders to conduct independent assessments of AI applications.
5. **What are some Education and Training needs, as well as potential Collaboration?**
   - Implement programs to educate faculty, staff, and students about AI technologies, their applications, and potential implications.
   - Encourage continuous professional development to keep stakeholders informed about the latest advancements and ethical considerations in AI.
   - Enforce strict measures for securing AI-related data, including encryption, access controls, and regular security audits.
   - Implement protocols for reporting and addressing data breaches, ensuring a swift and transparent response.
   - Have clear policies on data access, security safeguards, purpose specification, and data destruction timelines.
   - Encourage collaboration with industry, government, and other educational institutions to share best practices, research findings, and resources related to AI in higher education.

SAMPLE COLLEGE ACADEMIC INTEGRITY POLICIES THAT INCLUDE AI

Currently, college districts within the California Community College system are at various stages of college and district-wide updates to policies as it relates to the inclusion of artificial intelligence. To support the work of local academic senates in these important conversations, below are a few college-wide policy. We recognize that these examples are from 4-year institutions. It is our hope that this resource document will be revised as more California community colleges and districts policies are updated. Also, we encourage policy developed to utilize growth-minded language, avoid fear-based policies, and be mindful of potential biases and equity concerns that may emerge. The sample of college-level policies are offered as a start to imbed some of the proposed guiding principles into this work.

COLLEGE POLICY EXAMPLE 1: Stanford University[4]

Guidance adopted February 16, 2023

HONOR CODE IMPLICATIONS OF GENERATIVE AI TOOLS

The Board on Conduct Affairs (BCA) has been asked to address the Honor Code implications of generative AI tools such as ChatGPT, Bard, DALL-E, and Stable Diffusion. These are novel tools, and both students and instructors have been experimenting with their use in academic settings.

While these tools have applications that foster student learning and understanding, these tools can also be used in ways that bypass key learning objectives.

To give sufficient space for instructors to explore uses of generative AI tools in their courses, and to set clear guidelines to students about what uses are and are not consistent with the Stanford Honor Code, the BCA has set forth the following policy guidance regarding generative AI in the context of coursework:

Absent a clear statement from a course instructor, use of or consultation with generative AI shall be treated analogously to assistance from another person. In particular, using generative AI tools to substantially complete an assignment or exam (e.g. by entering exam or assignment questions) is not permitted. Students should acknowledge the use of generative AI (other than incidental use) and default to disclosing such assistance when in doubt.

Individual course instructors are free to set their own policies regulating the use of generative AI tools in their courses, including allowing or disallowing some or all uses of such tools. Course instructors should set such policies in their course syllabi and clearly communicate such policies to students. Students who are unsure of policies regarding generative AI tools are encouraged to ask their instructors for clarification.

The BCA will continue to monitor developments in these tools and their use in academic settings and may update this guidance. Members of the community are encouraged to contact the BCA to provide input, suggestions, and comments on this policy.

NOTE: As part of the BCA's guidance on clear communication of a course's generative AI policy, OCS recommends course instructors provide clear advance notice that they may use detection software to review work submitted for use of generative AI. Other helpful information can be found at Stanford University Tips for Faculty & Teaching Assistants.

COLLEGE POLICY EXAMPLE 2: Arizona State University[5]

Academic Integrity and Artificial Intelligence/ChatGPT

The use of Artificial Intelligence in courses

The College Dean's Office encourages academic units and faculty to determine whether student use of generative AI/ChatGPT in their courses is permitted or prohibited and to state this and any parameters in your syllabi, announcements, and assignment instructions. See these resources for recommendations:

[4] Found at: https://communitystandards.stanford.edu/generative-ai-policy-guidance

[5] Found at: https://instruction.thecollege.asu.edu/academicintegrityAIChatGPT

- The College Generative AI Principles 2023-2024
- ASU Provost- Genarative AI

Additionally, faculty should include the ASU Academic Integrity policy in their syllabi, including copyright and plagiarism verbiage. The use of Generative AI/ChatGPT falls within ASU's Academic Integrity policies and processes.

Within their courses and assignments, faculty should emphasize that students must cite any borrowed content sources to comply with all applicable citation guidelines and copyright law and avoid plagiarism. Simply put, if students use generative AI, they should cite it: How to Cite ChatGPT (APA website); ASU Library Guide on Citing Generative AI Models

Students and faculty should also ensure any AI-generated citations are correct, as generative AI tools are notorious for listing nonsensical citations.

Find more ASU academic integrity resources.

SAMPLE CLASSROOM POLICIES/SYLLABUS LANGUAGE

Ideally, local classroom policies should align with your college/district polices as it relates to student code of conduct expectations and academic integrity. Some additional considerations for classroom policies could include[6]:

- Citing AI-generated content: require citations for any AI generated text/media, use consistent citation style (MLA, APA, etc.)
- Appropriate versus inappropriate uses: setting clear policies on what type of AI use are permitted, caution against perpetuating harmful biases, caution against AI generated papers or exam responses.
- Impact on learning: ensure AI does not replace deeper learning, use AI as a creativity aid and "thought partner" rather than sole output.

Individual disciplines and instructors may have various allowances for the use of AI in their discipline/class. It is important to communicate clearly with students any classroom specific policies while reiterating that what one instructor may allow is not a guarantee that other disciplines/instructors will allow the use of AI in the same manner.

In preparation for the following examples, the Education Policies Committee reviewed many drafts and adopted sample text provided by California Community College faculty. We received informal examples from rural single-college districts, large multi-college districts, and samples from various regions represented in the California Community College system. In this collection a trend of similar ideas and reliance on some outside-of-California examples were emerging as a resource. With the wide array of examples, the ASCCC Educational Policies Committee searched for the most representative example (that is student centric) that was being supported by a local academic senate review and endorsement.

As a reminder, these sample polices are not directives by ASCCC, but to provide a resource for local faculty and academic senate to engage in constructive conversations around this topic for debate and consideration as applicable in their unique setting.

The range of comfort with the use of generative AI will influence the type of classroom and college-wide policies that are adopted. During the collaborative CCCCO AI webinar series, the following continuum was shared.

[6] Suggestions provided during Vision 2030: Generative AI in Higher Education webinar co-facilitated by CCCCO, ASCCC and FACCC Nov 7, 2023 (will require you to log into the CCCCO VRC prior to attempting to open)

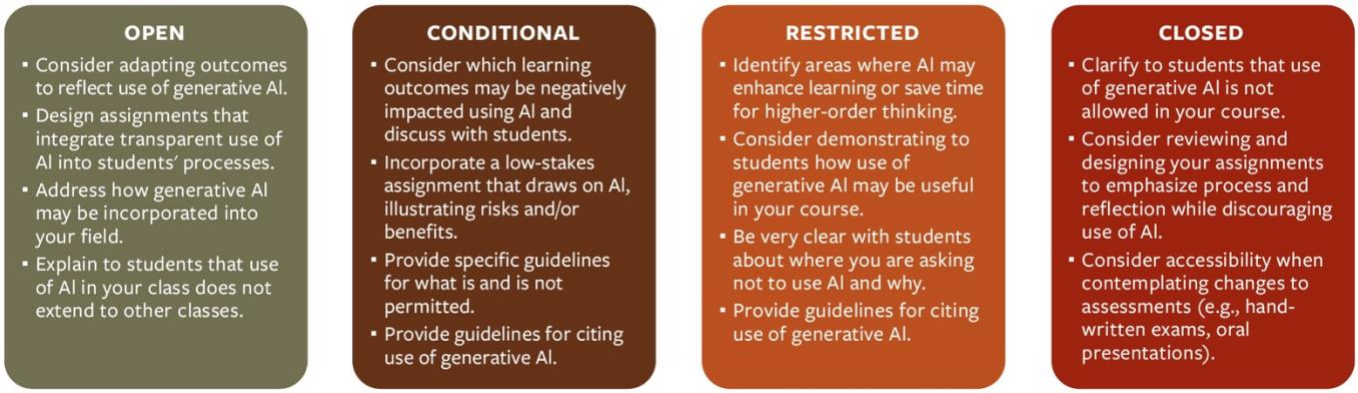

Image Found: California Community College Chancellor's Office- Vision Resource Center (November 7, 2023) Vision 2030: Generative AI in Higher Education Webinar 2 of 4: Generative AI as a Tool for Teaching and Learning [PowerPoint Slides]

Using this continuum the following sample syllabus language is organized. As the "conditional" and "restricted" categories have degrees of overlap, we are providing "conditional/restricted" joint examples that could be edited to reflect the degree of allowance.

SYLLABUS EXAMPLE 1: OPEN- Allowed Statement

Generative artificial intelligence (GenAI) tools like ChatGPT, DALL-E, or GitHub CoPilot, that generate output may be used in this course as you determine appropriate, as long as you do so honestly through proper documentation, citation, and acknowledgement.

To demonstrate your honest use of these tools and your learning process, you must:

- *Keep histories of your chats and submit them when requested.*
- *Cite the content that came from GenAI tools using citations methods endorsed by the library.*

NOTE: GenAI is known to fabricate sources, facts, and give false information. It also perpetuates bias. You should also be aware that there are copyright and privacy concerns with these tools. You should exercise caution when using large portions of content from AI sources for these reasons. Also, you are accountable for the content and accuracy of all work you submit in this class, including any supported generative AI.

SYLLABUS EXAMPLE 2: OPEN - Allowed Statement

While using various digital tools and resources is permitted and encouraged during creative and academic projects, students must properly cite and reference any material generated and/or significantly altered/enhanced by AI and must not present such material as their own original work. There is also an expectation that students acknowledge the ways in which any AI tools have been utilized as part of their creative process. Additionally, some assignments in this course must be completed without the use of AI generated content at any point during the project. If you're not clear on whether to use or cite AI, please ask me!

Because images or text generated by AI tools such as ChatGPT are not retrievable or searchable, it currently falls into the "personal communication" category for APA citations and MLA's general AI citation guidelines. Neither of these options seem to fully address concerns expressed by faculty regarding transparency when students have utilized AI applications in their creative process. Therefore, faculty may ask students to submit the full text or images derived from AI tools along with their original drafts and final assignments:

If an authorized AI app was used at any point in the process of completing an assignment, students are required to document their prompt as well as the AI response via printouts or screenshots of AI-generated text and images along with the date on which the results were produced.

SYLLABUS EXAMPLE 3: CONDITIONAL/RESTRICTIVE Statement

Note: Example 3: Inspired from Ohio State University, Inara Scott and adopted locally in a CCC

I expect you to generate your own work in this class. When you submit any kind of work (including projects, exams, quizzes, or discussions), you are asserting that you have generated and written the text unless you indicate otherwise by the use of quotation marks and proper attribution for the source. Submitting content that has been generated by someone other than you, or was created or assisted by a computer application or tool, including artificial intelligence (AI) tools such as ChatGPT is cheating and constitutes a violation of the Student Conduct Code. You may use simple word processing tools to update spelling and grammar in your assignments, but you may not use AI tools to draft your work, even if you edit, revise, or paraphrase it. There may be opportunities for you to use AI tools in this class. Where they exist, I will clearly specify when and in what capacity it is permissible for you to use these tools.

Example of guidance on individual assignments:

I want to address the new AI-tools that you may be hearing about, such as ChatGPT, and their possible role in this project. I want you to be aware that ChatGPT is based on a large language model--it is basically crowdsourcing information and providing likely answers based on the vast amount of text in its database. While it can provide some helpful information, and may spur your thinking in some areas, it is not a reliable source and cannot provide citations or references to reliable data or evidence. (If you ask it for a citation, be aware that it makes things up and the information it's giving you is likely garbage!)

So, can I use ChatGPT or other AI tools to help write this paper?

***Things you can do:** ask ChatGPT questions! I personally enjoy chatting with it about topics I'm interested in. For example, "What are some current issues related to sustainability in the airline industry?" When you read what it says, keep in mind that it's probably at least 60-70% correct, but perhaps not more than that. :-) Given that you're considering whatever it told you with a big grain of salt, you'll then need to do some research to find peer reviewed and reliable evidence that might corroborate (or disagree with!) what the AI tool told you. Use those articles to find other articles that consider the same question (review the citation list for other articles to read). Either before or after you ask ChatGPT a question, try a google search with the same sort of query and see what it turns up; also, try a search on the OSU library system. Review, compare, and investigate. Repeat this cycle, keeping in mind that what you're getting from AI is crowdsourced information, not the reliable product of research and assessment.*

***Things you cannot do:** Do not use ChatGPT to draft your paper. Do not use ChatGPT to give you citations. I am saying this both for purposes of coming up with reliable evidence and also from an academic integrity (i.e, cheating) standpoint. If you didn't write it, don't put your name on it and claim that you wrote it. Don't modify a few words here and there and claim you wrote it either. Close the window before you start drafting and put the real evidence and articles you've found into your own words. Do your own analysis and critical thinking.*

SYLLABUS EXAMPLE 4: CONDITIONAL/RESTRICTIVE Statement

Note: Example 4: Inspired from Plymouth State University, Pam Harland and adopted locally in CCC

Within this course, you are welcome to use generative artificial intelligence (Ai) models (ChatGPT, DALL-E, GitHub Copilot, and anything after) with acknowledgment. However, you should note that all large language models have a tendency to make up incorrect facts and fake citations, they may perpetuate biases, and image generation models can occasionally come up with offensive products. You will be responsible for any inaccurate, biased, offensive, or otherwise unethical content you submit regardless of whether it originally comes from you or an Ai model.

If you use an Ai model, its contribution must be cited and discussed:

What was your prompt?

Did you revise the Ai model's original output for your submission?

Did you ask follow-up questions?

What did you learn?

Having said all these disclaimers, the use of Ai models is encouraged, as it may make it possible for you to submit assignments and your work in the field with higher quality and in less time.

SYLLABUS EXAMPLE 5: CONDITIONAL/RESTRICTIVE Statement

Use only with prior permission Students are allowed to use advanced automated tools (artificial intelligence or machine learning tools such as ChatGPT or Dall-E 2) on assignments in this course if instructor permission is obtained in advance. Unless given permission to use those tools, each student is expected to complete each assignment without substantive assistance from others, including automated tools.

-or-

Use only with acknowledgement Students are allowed to use advanced automated tools (artificial intelligence or machine learning tools such as ChatGPT or Dall-E 2) on assignments in this course if that use is properly documented and credited. For example, text generated using ChatGPT-3 should include a citation such as: "Chat-GPT-3. (YYYY, Month DD of query). "Text of your query." Generated using OpenAI. https://chat.openai.com/" Material generated using other tools should follow a similar citation convention.

SYLLABUS EXAMPLE 6: CLOSED - Banned Level

*Grammar, composition, and/or vocabulary are part of the learning outcomes of this course. Therefore, all assessments (writing assignments, oral compositions, presentations, summaries, etc.) must be your original work. The use of artificial intelligence (AI) tools, **such as** ChatGPT, is prohibited. The use of AI tools is considered plagiarism in this course, and disciplinary actions fall under the plagiarism guidelines. The instructor may follow up with the student with an oral conversation to assess the learning*.

SYLLABUS EXAMPLE 7: CLOSED - Banned Level

Students are not allowed to use advanced automated tools (artificial intelligence or machine learning tools such as ChatGPT or Dall-E 2) on assignments in this course. Each student is expected to complete each assignment without substantive assistance from others, including automated tools.

ADDITIONAL SYLLABUS RESOURCES

In addition to these representative syllabus language examples, the ASCCC Educational Policies Committee also discovered the following repositories for exploration and consideration.

Additional Resource: Crowd-Sourced Syllabus Example (Eaton)

Some of our local California Community College academic senates and even one of our multi-college districts distributed the following link to faculty (and others) as well as posted this resource on their website to support local efforts. This "grassroots" repository may provide additional resources for syllabus examples with uploaded samples that have not been vetted.

Syllabi Policies for AI Generative Tools[7] – Curated by Lance Eaton - This resource is a crowd-sourced public document from other educators who have offered to share their policies. This resource contains discipline-specific examples that can be sorted by course and discipline. Note that not all disciplines are represented, only those from faculty who have volunteered their work. A Spanish version of these policies is included with the resource.

[7] Found at: https://docs.google.com/document/d/1RMVwzjc1o0Mi8Blw_JUTcXv02b2WRH86vw7mi16W3U/edit#heading=h.1cykjn2vg2wx

Additional Resource: Carnegie Mellon University (Ebergly Center)[8]

Examples of possible academic integrity policies that address student use of generative Ai tools – This repository provides an additional 6 examples representing a range of options that could be adapted or adopted based on student learning objectives and the context of the course.

Additional Resource: Chapman University (Syllabus Policy on the use Generative AI Tools[9]

Chapman University's Artificial Intelligence (AI) Hub is another resource with considerations for syllabus policy on the use of AI generative tools, as well as, additional information on bias in AI, classroom engagement with AI, and some explicit guidelines for the use of artificial intelligence in research/scholarship/creative activities.

Additional Resource: WCET AI Policy Center [10]

WCET AI Policy Center - WCET – the WICHE Cooperative for Educational Technologies is the leader in the practice, policy, & advocacy of digital learning in higher education. This group is a member-driven organization that brings together colleges, universities, higher education organizations, and companies to collectively improve the quality and reach of digital learning programs.

SOME ADDITIONAL RESOURCES FOR CONSIDERATION

- Book: Algorithms of Oppression: How Search Engines Reinforce Racism (2018) by Safiya Umoja Nobel ISBN:9781479849949
- Book: Unmasking AI: My Mission to Protect What is Human in a World of Machines (2023) by Joy Buolamwini ISBN: 9780593241837
- Mt.San Antoinio College – Artificial Intelligence and Education Guide – Multiple resources linked within this document for exploration.
- Chapman University Artificial Intelligence (AI) Hub
    - AI in the Classroom – A collection of resources, class activities
- ASCCC Rostrum Article: Artificial Intelligence, Generative AI, and Ethics: An Educational Perspective (Feb. 2024) Nguyen, T., Sisneros, H., & Chow, K.
- Article: Developing Institutional level AI Policies and Practices: A Framework (12/7/2023) WCET Davis, V.

POLICY DEVELOPMENT DECISION POINTS

Process for developing academic and professional policies may vary by college district and local senates. However, as a conversation starter, a potential AI integrity policy creation decision tree is provided below with potential detailed decision points. This decision tree provides a structure approach to creating an AI academic integrity policy that is comprehensive, transparent, and adaptable.

[8] Found at: https://www.cmu.edu/teaching/technology/aitools/academicintegrity/index.html#:~:text=If%20you%20use%20a%20generative,AI%20without%20citation%20is%20plagiarism.

[9] Found at: https://www.chapman.edu/ai/chapman-considerations-for-syllabus-policy-on-the-use-of-ai-generative-tools.aspx

[10] Found at: https://tinted-xenon-994.notion.site/WCET-AI-Policy-Center-74bdab27cc1243d88fbe834a991cac05

DETAILED DECISION POINTS

Define Scope and Objectives

- **Identify Objectives**: Determine the primary goals of the AI integrity policy. For instance, is the focus on preventing cheating, fostering a culture of honesty, or educating students about ethical AI use?
- **Define Scope**: Decide which courses and programs the policy will cover and what types of AI tools will be addressed.

Establish Policy Framework

- **Form a Committee**: Gather a diverse group to ensure the policy is well-rounded and considers various perspectives. Faculty should be appointed by Academic Senate.
- **Review Existing Policies**: Understand the current landscape to ensure the new policy complements existing ones.
- **Research Best Practices**: Look into what other institutions are doing and seek advice from ethical and legal experts.

Develop Policy Components

- **Permissible Uses**: Clearly state what AI tools and uses are allowed. For example, using AI for grammar checks might be permitted, but generating entire essays might not.
- **Prohibited Uses**: Specify what constitutes misuse of AI tools.
- **Responsibility and Accountability**: Define who is responsible for what, including students' responsibilities and faculty's role in monitoring compliance.
- **Detection and Reporting**: Detail the mechanisms for detecting AI misuse and the process for reporting violations.

Implementation Plan

- **Education and Training**: Plan educational initiatives to inform students and staff about the policy and the ethical use of AI.
- **Communication Strategy**: Develop a strategy to effectively communicate the new policy to all stakeholders.
- **Technology Integration**: Ensure the necessary tools and IT support are in place to enforce the policy.

Policy Review and Feedback

- **Pilot Phase**: Implement the policy on a small scale to gather initial feedback and make adjustments as needed.
- **Ongoing Evaluation**: Regularly review the policy to keep it up-to-date with technological advancements and feedback from the community.

FINAL THOUGHTS

Provided in this resource document are suggested guidelines, examples, and considerations to hopefully aid local academic senate in having constructive policy conversations at various levels. Nothing in this document is a requirement or a mandate. As with policies that may impact our students, it is highly encouraged to find ways to bring your students into these conversations as well. Although this is a resource initially intended for our academic integrity policies, much of this framework can be adapted to other policy developments as AI continues to evolve and new applications of AI are considered.

Finally, the ASCCC Educational Policies Committee would like to share our gratitude to the many individuals and groups who shared their local practices and status to help us discover trends, but also illuminate the continued need for resource development as we mature our understanding on these related topics.

GLOSSARY OF AI TERMINOLOGY[11]

1. **Algorithm** — the set of logical rules used to organize and act on a body of data to solve a problem or to accomplish a goal that is usually carried out by a machine. An algorithm is typically modeled, trained on a body of data, and then adjusted as the results are examined. Because algorithms are generally processed by computers and follow logical instructions, people often think of them as neutral or value-free, but the decisions made by humans as they design and tweak an algorithm and the data on which an algorithm is trained can introduce human biases that can be compounded at scale. Humans who interact with an algorithm may also find ways to influence the outcomes, as when a marketer finds ways to push a website up in the results of a search through search engine optimization (SEO).
2. **Algorithmic justice** — the application of principles of social justice and applied ethics to the design, deployment, regulation, and ongoing use of algorithmic systems so that the potential for harm is reduced. Algorithmic justice promotes awareness and sensitivity among coders and the general public about how data collection practices, machine learning, AI, and algorithms may encode and exacerbate inequality and discrimination.
3. **Algorithmic literacy** — a subset of information literacy, algorithmic literacy is a critical awareness of what algorithms are, how they interact with human behavioral data in information systems, and an understanding of the social and ethical issues related to their use.
4. **Artificial intelligence (AI)** — a branch of computer science that develops ways for computers to simulate human-like intelligent behavior, able to interpret and absorb new information for improved problem-solving, and recognize patterns. Examples include training robots, speech recognition, facial recognition, and identifying objects such as traffic signs, trees, and human beings necessary for self-driving cars. AI relies on machine learning capabilities and training data. Humans are involved in creating or collecting sets of training data (e.g., employing low-wage workers abroad to identify objects on computer screens to provide data for autonomous vehicle navigation). Bias may be built into machine learning (e.g., by using criminal justice data sets for risk assessment in predictive policing). Machines can be trained to learn from experience but common sense and recognizing context are difficult, thus limiting the ability of computer programs to perform tasks such as distinguishing hate speech from colloquial humor or sarcasm.
5. **Artificial Intelligence as a Service (AIaaS):** Cloud-based AI services providing higher education institutions with access to AI tools, algorithms, and infrastructure, facilitating the development of AI-driven applications and research projects without significant upfront investments.
6. **Artificial Intelligence Augmentation (AI Augmentation**): The integration of AI technologies to enhance human capabilities in higher education, empowering educators and researchers with AI-driven tools for personalized learning, data analysis, and administrative decision-making.
7. **Artificial Intelligence Bias Mitigation (AI Bias Mitigation):** Strategies and policies for identifying, mitigating, and preventing biases in AI systems, critical in higher education for ensuring fairness, equity, and diversity in student assessment, admissions, and educational opportunities.
8. **Artificial Intelligence Chipsets (AI Chipsets):** Specialized hardware accelerating AI computations, utilized in higher education for research in AI algorithms, training large-scale models, and deploying AI applications with improved performance and energy efficiency.
9. **Artificial Intelligence Ethics (AI Ethics**): The development and deployment of AI systems in alignment with ethical principles and societal values, crucial in higher education for ensuring fairness, equity, and accountability in student assessment, admissions, and decision-making processes.
10. **Artificial Intelligence Explainability (AI Explainability):** Techniques ensuring transparency and interpretability of AI models, vital in higher education for explaining grading decisions, student feedback, and adaptive learning recommendations to students, instructors, and stakeholders.
11. **Artificial Intelligence Governance (AI Governance):** Policies and regulations governing the development, deployment, and use of AI technologies in higher education, ensuring ethical and responsible AI practices, data security, and compliance with legal requirements.

[11] OpenAI. (2024). Glossary of Terms Associated with Artificial Intelligence for Higher Education Policy Creation. Retrieved from [https://chat.openai.com/c/2ba41437-4a9a-4173-bbc8-c1b9352343df]

12. **Artificial Intelligence Safety (AI Safety**): Concerns and measures addressing potential risks and harms associated with AI technologies, guiding higher education institutions in the responsible development and deployment of AI systems to ensure student and staff well-being, data security, and regulatory compliance.
13. **Attention economy** — since our attention is a limited resource and every person only has so much of it, companies (both platforms and people who use the platforms to sell, entertain, or persuade) try to engage and keep people's attention. This rewards clickbait and influences the design of algorithms and platforms to maximize time spent online.
14. **Bias in AI**: Systematic favoritism or prejudice in AI systems, posing challenges in higher education such as biased admissions algorithms and unfair grading systems, necessitating policies for bias detection, mitigation, and transparency.
15. **Big data** — a set of technological capabilities developed in recent years which, when used in combination, allows for the continuous gathering and processing of large volumes of fine-grained and exhaustive data drawn from multiple sources to be combined and analyzed continuously.
16. **Computer Vision**: An AI discipline enabling computers to interpret and analyze visual information, utilized in higher education for tasks such as facial recognition for campus security, content accessibility, and augmented reality applications.
17. **Data exhaust** — information incidentally generated as people use computers, carry cell phones, or have their behavior captured through surveillance which becomes valuable when acquired, combined, and analyzed in great detail at high velocity.
18. **Deep Learning**: A branch of machine learning involving neural networks with multiple layers, used in higher education for tasks such as personalized learning, predictive analytics, and natural language processing.
19. **Edge AI**: The deployment of AI algorithms on edge devices, enabling real-time processing and inference in higher education applications such as IoT-based campus management, personalized learning tools, and mobile educational apps.
20. **Edge Computing**: Decentralized processing of data near the source of generation, beneficial in higher education for low-latency AI applications, real-time analytics in remote locations, and efficient utilization of computing resources.
21. **Ethical AI:** The development and deployment of AI systems in alignment with ethical principles and societal values, crucial in higher education for ensuring fairness, equity, and accountability in student assessment, admissions, and decision-making processes.
22. **Explainable AI (XAI):** Techniques and methods ensuring transparency and interpretability of AI models and decisions, essential in higher education for maintaining trust, accountability, and regulatory compliance in academic and administrative AI systems.
23. **Generative Adversarial Networks (GANs):** AI frameworks where two neural networks compete to generate realistic data, utilized in higher education for creating synthetic datasets, generating educational content, and improving data privacy.
24. **Hyperparameters**: Parameters defining the configuration and behavior of AI models, requiring optimization and tuning in higher education applications for achieving optimal performance, reliability, and scalability.
25. **Machine Learning (ML):** A subset of AI focusing on algorithms and techniques that enable computers to learn from data and improve their performance over time without being explicitly programmed. Also, the use of algorithms, data sets, and statistical modeling to build models that can recognize patterns to make predictions and interpret new data. The purpose of machine learning is to enable computers to automate analytical model-building so computers can learn from data with little human intervention.
26. **Model Interpretability**: The ability to explain and understand AI models and their decisions, essential in higher education for transparent student assessment, research reproducibility, and accountability in automated decision-making systems.
27. **Model Robustness**: The capability of AI models to maintain high performance and reliability under varying conditions and inputs, critical in higher education for ensuring accurate student assessment, research findings, and administrative decision-making.
28. **Natural Language Processing (NLP**): The field of AI concerned with enabling computers to understand, interpret, and generate human language, utilized in higher education for automated grading, language learning support, and virtual assistants.

29. **Neural Network:** A computational model inspired by the human brain's structure, employed in higher education for various applications including student performance prediction, adaptive learning systems, and data analysis.
30. **Personalization** — the process of displaying search results or modifying the behavior of an online platform to match an individual's expressed or presumed preferences, established through creating digital profiles and using that data to predict whether and how an individual will act on algorithmically selected information. This process drives targeted digital advertising and has been blamed for exacerbating information silos, contributing to political polarization and the flow of disinformation. Ironically, to consider information "personal" implies it is private, but personalization systematically strips its targets of privacy.
31. **Platform** — an ambiguous term that means both software used on personal computers and software deployed online to provide a service, such as web search, video sharing, shopping, or social interaction. Often these systems use proprietary algorithms to mediate the flow of information while enabling third parties to develop apps, advertising, and content, thus becoming digital spaces for the individual performance of identity online, data-driven persuasion (commercial as well as political), and group formation through social interaction. In this report, we use the term to refer to "internet giants" such as Google, YouTube, Instagram, and Facebook and others mentioned by students in our focus group sessions.
32. **Reinforcement Learning:** An AI paradigm where algorithms learn by interacting with an environment and receiving feedback, applicable in higher education for adaptive learning environments and personalized feedback systems.
33. **Semi-Supervised Learning:** A combination of supervised and unsupervised learning techniques, employed in higher education for tasks such as student performance prediction with limited labeled data and large-scale data analysis.
34. **Supervised Learning**: A machine learning approach where models are trained on labeled data, used in higher education for predictive modeling, recommendation systems, and intelligent tutoring systems.
35. **Transfer Learning**: A machine learning technique where models trained on one task are adapted to perform related tasks, valuable in higher education for leveraging pre-trained models in educational content creation, student support systems, and academic research.
36. **Unsupervised Learning:** A machine learning approach where models uncover patterns and structures from unlabeled data, relevant in higher education for clustering similar student cohorts, curriculum optimization, and anomaly detection.