Artificial Intelligence Chatbots Working Group
Recommendations to President Seidel
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From the UW AI Chatbot Working Group: Co-Chairs Renee Laegreid and Anne Alexander, Members Steve Barrett, Gabrielle Allen, Kelly Kinney, Janel Seeley, Rick Fisher, Richard Miller, Andre Fecteau, Hunter Swilling, Nycole Courtney

Introduction and Executive Summary

The increasing public access to artificial intelligence, including large language models such as those developed by OpenAI, deserves the close attention of higher education institutions. These forms of artificial intelligence will have substantial impacts on traditional learning environments as well as on the civic, disciplinary, and professional possibilities to students after their graduation.

As we understand them, artificial intelligence technologies such as ChatGPT pose problems for educational and research settings in part because they are capable of producing novel outputs that fall somewhere between "source" and "creator," thereby disrupting traditional notions of intellectual property and academic integrity. Additionally, current AI text generators lack reliability, and current (as of February 2023) versions of ChatGPT distort and even fabricate information.

Simultaneously, however, current versions of ChatGPT are capable of producing extensive stretches of text and code very quickly, thus promising efficiency in the hands of knowledgeable and critical users. Additionally, their natural language capabilities allow users to produce increasingly refined text in response to user inputs. And, as AI technologies learn and their capabilities expand, many of their limitations will diminish or disappear.

In producing this report, our aim has been to provide guidance to help maintain academic integrity, promote thoughtful and engaged teaching and research, and identify ongoing campus needs and opportunities related to these new technologies. We draw your attention to the ten specific highlights noted below and explained in more detail in the report.

Recommended Modifications to Academic Policies
1. We advise that the student academic dishonesty policy be updated to bar the "unpermitted use of Artificial-Intelligence-based applications."

Supporting Instructors in Navigating These New Technologies
1. ECTL is taking the lead on initial efforts this spring to support instructors, and a survey (to be launched this month) will help identify faculty needs for future programming.

Student Communications on Appropriate Use and Academic Integrity

1. Advisors, Cowboy Coaches, Supplemental Instruction leaders, Writing Center consultants, Saddle Up instructors, and ASUW have been identified as avenues for communication with existing students about AI and academic integrity.
2. The annual Articulation Summit with Wyoming community colleges, Saddle Up for transfer students, and the UW Parent and Student Newsletter provide ways to communicate with stakeholders beyond campus about updates to UW policy that may affect them.

Anticipating and Preparing for the Evolution of AI: Recommendations and Next Steps

1. We recommend updates to the syllabus template, specifically to provide faculty with several versions of draft language that articulate the scale of permissible uses they endorse in their courses.
2. We encourage the President to direct resources to AI-driven shifts in two key areas: (1) university wide processes & practices (both educational and administrative), and (2) UW efforts to promote diversity, equity, inclusion, and privacy.
3. We anticipate that faculty will need continuing opportunities to update their philosophy of use and their understanding of ethical implications related to AI.
4. We anticipate that departments will need to update RT&P policies and scholarly activity definitions to reflect disciplinary impacts of AI-variants.
5. At the institutional level, we anticipate that the increasing presence of AI may require strategic hiring and training priorities, potentially including a cluster hire focused on educational impacts of AI.
6. We encourage the President to form a continuing AI working group to monitor emerging practices, policies, opportunities and concerns.

I. Recommended Modifications to Academic Policies

Recommendation: Update UW Regulation 2-114
As a general policy for teaching and learning settings, we propose that the university include language to restrict "unpermitted use" of AI-based applications in its Student Academic Dishonesty policy. We provide draft language in Section IV.

Recommendation: Update the syllabus template
Recognizing that a single AI policy is inappropriate to the range of courses and modalities at UW, we caution against a "one size fits all" response to ChatGPT and related technologies. Instead, we recommend including three/four sets of template language for instructors to adopt or adapt for their local settings. We believe this approach can help instructors see the range of potential responses as well as adopt language that best fits their goals and values. Our suggested draft language is provided in Section IV below.

II. Supporting Instructors in Navigating These New Technologies

Initial efforts to support faculty have included:
1. A 90-minute pre-semester demo and discussion facilitated by the UW Communication Across the Curriculum program (Jan. 13, 2023).
2. A President's Roundtable on ChatGPT (Jan. 31, 2023).
3. Print and video materials from the UW Communication across the Curriculum program.
4. Numerous formal and informal college- and department-level discussions leading into Spring semester of 2023.

Moving forward, the ECTL is prepared to act as a resource hub for faculty as they consider how to work with AI applications in their curricula. Already the ECTL plans the following programming.
1. **Three 50-minute sessions** planned for a Teaching and Learning Symposium on Feb. 23. One session will be an overview from a panel (ECTL faculty); the other two sessions feature faculty (Danny Dale and William Cain) discussing how they have created assignments using ChatGPT in their classroom.
2. **A learning community for instructors and administrators** interested in doing further research and thinking together about ChatGPT throughout the remainder of this semester. Together, this group will decide the types of resources that may be useful to create/share with faculty during fall ECTL programming.
3. **Results of a Spring 2023 faculty survey** (described below) will further inform the ECTL about specific faculty needs related to AI technologies.

In process: Campus survey. Academic Affairs has already begun modifying a survey (developed by Associate Professor William Cain) for distribution to the entire campus community. The survey will provide campus with a broad view of the faculty's existing knowledge, uses, and attitudes about ChatGPT and related AI technologies. This information will help Academic

Affairs and the ECTL understand which kinds of faculty development topics might be most valuable for future programming.

III.   Student Communications on Appropriate Use and Academic Integrity

Recommended venues for communicating with students about the ethical use of chatbots and other AI technologies include:

Academic advisors

> Advising Managers will be informed and updated on any changes to Academic Dishonesty Policies during weekly Advising Manager meetings.

> Professional advisors will communicate new and existing Academic Dishonesty polices with students during upcoming advising sessions for summer and fall enrollment.

> Navigate can be utilized to send out email campaigns to any specific populations.

Cowboy Coaches and Supplemental Instructors

> Cowboy Coaches will share information about AI policies during scheduling individual meetings with incoming freshmen.

> The Student Success and Graduation Hub will provide a "dinner with direction" program in the Fall 2024 with AI chatbots and variants as a topic with a faculty expert from School of Computing or other areas with expertise.

> Supplemental Instruction Leaders and Writing Center consultants can share information, best practices, and guidance during supplemental instruction sessions and consultations as appropriate.

ASUW surveys and communications. ASUW plans to send a survey to students the third week of February that includes four questions on student awareness of ChatGPT and related AI variants, and its use (permitted or unpermitted) in course assignments.

Saddle Up instructors. During skills sessions on study skills, instructors can facilitate a discussion of ethical use of AI and how to read and use syllabi to understand each instructor's position on the use of AI chatbots and other AI platforms.

Beyond UW, we identify the following approaches for communicating with stakeholders including community colleges, transfer students, and parents:

1. Share information about UW policies at the annual **Articulation Summit** with community college partners and through other venues such as Common Course Numbering System meetings.
2. Through the **Transfer Saddle Up session**, share information and guidance with transfer students via an active panel discussion.
3. Use the **UW Parent and Student Newsletter** to communicate final policy recommendations

IV. Anticipating and Preparing for the Evolution of AI: Recommendations, and Next Steps

Anticipating and Preparing for the Evolution of AI Chatbots and Other AI Variants

New tools and technologies in AI appear every day; from the rapid adoption of ChatGPT in 2022 and associated large investments in it made by Microsoft, to the current closed beta-testing of Google's new tool Bard and early-stage development of a similar tool by Alibaba, to Otter.ai (virtual meeting notes in real time), Tome.ai (generative storytelling), and Codex (code writing), it is nearly impossible to keep up with the speed of development in this evolution. Preparing for the future will need to be an iterative and evolving discussion for UW. We will need to be prepared to think about many of our business, academic, and student-success processes. We anticipate two broad areas of impact:

1. *A shift in university wide processes and practices (educational and administrative), necessitating*
   a. Nimble responses to policies and procedures as they relate to ethical and appropriate use of AI technology inside and outside the classroom, including any countermeasures developed.
   b. Discussions about Reappointment, Tenure, and Promotion processes, as outlined in the next section.
   c. Discussions about whether, when, and how the use of chatbots in curriculum and other work product development should be disclosed.
   d. Exploration of the impacts of the potential use of chatbots for individual advice and counseling (not medical or psychological counseling, but personal counseling) for our students, staff, and faculty, including the mitigation of harmful or inaccurate advice given by platforms.
   e. Exploration of the potential use of chatbots and other related technologies for producing curriculum and other work products (e.g., student recommendation letters), as addressed in the next section.
   f. Insurance that curricula and faculty expertise reflect the skills needed to ethically use AI variants and to support development of AI-related studies such as law.
2. *Impacts to UW efforts to ensure diversity, equity, inclusion, and privacy*, necessitating
   a. Exploration and discussion of privacy issues in use of AI variants.
   b. Approaches for ensuring equitable access to and training on ethical use of chatbots and related AI technologies.
   c. Action to understand and mitigate bias and inaccuracies produced by chatbots and related AI variants.

As chatbots grow more popular, there will be more UW community members regularly interfacing with them and other AI variants. Adoption of and adaptation to these variants will need to be carefully considered to ensure they align with university policies and mission surrounding diversity, equity, inclusion, privacy, and applicable intellectual property laws and other various legislation.

Recommendations and Next Steps

Update syllabus language. We recommend modifying UW Regulation 2-114 as outlined below (suggested modifications are highlighted in bold/underlined):

>**A. Cheating:** Using sources, information, study aids, notes, materials, devices, or collaboration unauthorized and not explicitly approved by the Instructor. Examples include but are not limited to doing a class assignment for someone else or allowing someone to copy one's assignment; copying from, or assisting, another student during an examination; ***unpermitted use of Artificial Intelligence-based applications; or*** stealing, or otherwise improperly obtaining, copies (hard copy or digital) of an examination before or after its administration.

>**C. Fraud:** Falsifying, altering or inventing data, research, or citations for an academic endeavor; fabricating, forging or otherwise misrepresenting to an instructor or an institution one's past or current academic or professional activities; impersonating someone or allowing oneself to be impersonated for an examination or other Academic Endeavor; using a ghost writer ***or unpermitted use of Artificial Intelligence-based applications,*** commercial or otherwise, for any type of assignment.

Update syllabus template. It is important for instructors to be informed of Artificial Intelligence-based resources available to students, the potential uses of these resources within specific courses, and the need for clear communication of expectations to students. Thus, instructors may want to view these resources on ChatGPT fundamentals and considerations for use within a course:

- "Tips for Integrating (or Limiting) Student Use of ChatGPT in Classroom Writing Assignments."
- Video: Short-term considerations: https://use.vg/vibe0b
- Video: Framework for big-picture adaptation: https://use.vg/r1OzhH

We recommend that faculty include a section focused on permitted/unpermitted AI technology use in each of their syllabi, generally in the location of their Student Academic Dishonesty statement. Additionally, it is important that faculty clearly communicate their expectations of course collaboration policies (with other students) in this same area.

We offer the following language as draft material (adapted from University of Delaware) that instructors may want to consider. Additional samples, specific to individual disciplines/contexts, are available here: https://docs.google.com/document/d/1RMVwzjc1o0Mi8Blw_-JUTcXv02b2WRH86vw7mi16W3U/edit

>**Option 1: Use prohibited**
>*Students are not permitted to use advanced automated artificial intelligence or machine learning tools on assignments in this course. Each student is expected to complete each assignment without substantive assistance from others, including automated tools.*

Option 2: Use only with prior permission
Students are permitted to use advanced automated artificial intelligence or machine learning tools 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.

Option 3: Use only with acknowledgement
Students are permitted to use advanced automated artificial intelligence or machine learning tools 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.

Option 4: Use is freely permitted with no acknowledgement
Students are permitted to use advanced automated artificial intelligence or machine learning tools on assignments in this course; no special documentation or citation is required.

Research cluster. Consider naming a research cluster of academic personnel who will research the educational impacts of chatbots and related AI and other potential impacts of these technologies.

Permanent working group. Appoint an ongoing permanent working group to consistently and frequently monitor AI evolution and peer responses, providing consistent information to campus, departments, and ECTL.

Reappointment, promotion, and tenure. Some departments may need to update RT&P expectations to help faculty assess the benefits and risks to use of/co-authorship with/co-creation of knowledge with AI chatbots and other AI variants in their scholarly work.

Outreach to and collaboration with Community Colleges and Wyoming K-12. AI chatbots and related technologies will impact not only UW, but the entire education ecosystem of Wyoming. A concerted and coordinated effort between Wyoming K-12, Wyoming Community Colleges, and UW in formulating policy and pedagogical responses would combine the collected wisdom of Wyomingites statewide in mapping a course for the future of AI chatbots and other AI variants.

Courses on AI at UW and development of learning outcomes for AI across the curriculum. We anticipate that the increasing presence of AI may require strategic hiring and training priorities, potentially including a cluster hire focused on educational impacts of AI and a close look at learning outcomes across the curriculum.