Problem-Solving Discussion Outline

CAS100B

I. Identify and define the problem:

a. "What should be the college policy on Chat GPT?"

b. Define terms:

- i. <u>Artificial Intelligence</u> the theory and development of computer systems able to perform tasks that normally require human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages.
- ii. <u>Language Model</u> A type of artificial intelligence that is trained to generate text in a way that resembles human language. ChatGPT is a type of language model.
- iii. <u>Pretrained Model</u> ChatGPT is a pretrained model, which means that it was trained on a large dataset before being released for use by others. This allows it to perform well on a wide range of tasks without the need for additional training

II. Analyze the problem:

a. History of the problem -

- i. Kevin Bryan, an associate professor at the University of Toronto, tweeted: "You can no longer give take-home exams/homework ... Even on specific questions that involve combining knowledge across domains, the OpenAI chat is frankly better than the average MBA at this point. It is frankly amazing." (Marche)
- ii. "Today, The New York Times reports this new artificially intelligent tool is upending testing as we know it in higher education." (Mitrano)
- iii. "Make no mistake, the birth of ChatGPT does not mark the emergence of concerns relating to the improper use of the internet in academia. When Wikipedia launched in 2001, universities nationwide were scrambling to decipher their own research philosophies and understandings of honest academic work, expanding policy boundaries to match pace with technological innovation." (Barnett)

b. How widespread is the problem

- i. "Already we learn that the largest public school system in the country, New York City's, has banned its use." (Mitrano)
- ii. "Now, the stakes are a little more complex, as schools figure out how to treat bot-produced work rather than weird attributional logistics." (Barrnett)
- iii. *In relation to ChatGPT in schoolwork* "That entire tradition is about to be disrupted from the ground up." (Marche)

c. What are the causes of the problem? The effects?

i. Potential Risks:

- 1. The use of AI technology in education and the ethics around it
- 2. Potential impact on students' critical thinking and problem-solving skills
- 3. Concerns about students relying too heavily on AI assistance

ii. Effects:

- 1. It can impact student learning and preparation for the workforce.
- 2. It can determine the level of use and integration of Chat GPT in the college curriculum
- 3. It can set guidelines for ethical and responsible use of AI technology in education

d. Who is harmed by the problem?

- i. *Possible Academic Integrity (Student Learning)
- ii. Copyright Holders
- iii. People's Learning (If Handled Improperly)

e. What methods already exist for managing the problem?

- i. Academic Policy Rules
- ii. People who understand the topics enough to detect foul play
- iii. Barriers of entry with exams and quizzes to truly test someone's knowledge on a subject

III.Standards/Criteria:

- **a.** Our solution should:
 - i. <u>Student input</u>: The policy should involve students in the decision-making process and consider their perspectives and needs.
 - ii. <u>Educational benefits</u>: The policy should maximize the educational benefits of using Chat GPT, such as enhancing student learning and engagement.
 - iii. <u>Flexibility</u>: The policy should be flexible and allow for updates and revisions as technology and educational practices evolve.

IV. Possible Solutions (5-10):

- a. <u>Awareness and Education</u>: Ensure that students, faculty, and staff are aware of the capabilities and limitations of AI (Artificially Intelligent) language models and how to identify them.
- b. <u>Ethical Use</u>: Encourage ethical and responsible use of AI language models, including avoiding plagiarism and not using them to create false or misleading information.
- c. <u>Accuracy and Reliability</u>: Consider the potential impact on the accuracy and reliability of information if AI language models are used in research or academic projects.
- d. <u>Intellectual Property</u>: Consider the potential impact on intellectual property rights, such as copyright and trademark, if AI language models are used in academic projects.
- e. <u>Data Privacy</u>: Ensure that the use of AI language models complies with data privacy regulations and protects the privacy of students, faculty, and staff.

- f. <u>Accessibility</u>: Consider the potential impact on accessibility for students with disabilities if AI language models are used in academic projects or for support services.
- g. <u>Limitations and Risks</u>: Acknowledge the limitations and potential risks associated with the use of AI language models, including the potential for biased or inaccurate results.

V. Best solution:

a. Implementing a hybrid approach where the use of Chat GPT is allowed for certain assignments, but prohibited for others, based on the educational objectives of each assignment.

VI. Implementation and testing:

- a. <u>Develop clear educational objectives for each assignment</u>: To determine whether the use of Chat GPT is appropriate for a particular assignment, the educational objectives for that assignment must first be clearly defined and understood. This could involve collaboration between faculty members, academic departments, and the college administration.
- b. Establish guidelines and protocols for the use of Chat GPT: Once the educational objectives for each assignment have been established, guidelines and protocols can be developed to ensure the appropriate use of Chat GPT in accordance with these objectives. This could involve setting restrictions on the types of information that may be obtained from Chat GPT, as well as guidelines for proper citation and referencing of any information obtained from the tool. Also, mechanisms for monitoring and enforcing these guidelines must be put in place to ensure their effectiveness.

Works Cited:

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