Chat:GPT
Implications for the Classroom

Ted Pedersen, Professor, Computer Science

Jill Jenson, Director, Academic Writing and Learning Center

Emily Woster, Lead Consultant, Writers' Workshop & Asst. Prof., ELWS

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What is ChatGPT?

What is ChatGPT?

● **A language model (LM)**

  ○ **"predicts" what comes next in text, autocomplete**

■ **traditionally based on 2 or 3 words of context**

  ○ **old idea (1950s), Claude Shannon**

● **A large language model (LLM)**

  ○ **trained on a huge sample of online text (45 TB, ~500 billion words)**

  ○ **uses large amounts of context in making completions / responses**

  ○ **optimized for dialogue, can refine or elaborate on responses**

  ○ **based on new technology (2017)**

■ **Attention is All You Need**

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What is Chat GPT? Cont.

- **Created by OpenAI**
  - **https://openai.com/blog/chatgpt/**
  - **Builds upon GPT-3, GPT-2, GPT, Transformers**
- **technically ChatGPT is a tuned version of GPT-3**
- **GPT-3 is GPT-2 with more data**
- **Free (for now)**
  - **https://chat.openai.com/**
- **Easy to use**
  - **chat interface**
- **Already well known**

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What can Chat GPT do?

- homework

- research proposals

- IRB proposals

- service

- teaching

- programming

- letters, email, and statements

- strategic planning

- self reflection

- fun

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What are educators' concerns?

- Writing to learn assignments might be lost

- ChatGPT not only writes but takes advice and then revises

- The tool will only keep improving

- We stand to lose cognitive functioning (ala letting iPhones remember all relevant phone numbers)

- If students interact with tech, instead of people, regarding writing, much is lost

- AI could make instructors and writing centers obsolete

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Concerns cont.

- **Makes it more difficult to convince students of the importance of writing**

- **The definition of plagiarism gets blurred**

- **It can analyze published articles**

- **There are few reasons for students *not* to use it**

- **We stand to lose the unique voice of BIPOC writers**

- **Instructors may start using Chat GPT to lighten their load**

- **Academics will (again) have to prove their value**

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Classroom Opportunities for Using ChatGPT

- Sparking conversations about learning, writing, academic integrity
- Teaching students to recognize the real from the fake (i.e., analyze a ChatGPT-generated response or write prompts to get a response)
- Using as a starting point (ala Wikipedia)
- Increasing equity for English language learners
- Saving evaluation time
- Helping writers form research questions
- Helping writers develop topics or see counterarguments
- Allowing ChatGPT to find patterns in ideas or for reflection
- Teaching students how to use AI tools ethically

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Actions You Can Take

- **Require in-class writing (not using technology) to better identify each student's writing (caveat—accessibility issues)**

- **Test your assignments against AI tools; get familiar with ChatGPT so you can spot when it's being used**

- **Require sources (it uses names in the field, but the studies aren't real) and/or specific examples**

- **Require students to submit mind maps, drafts, outlines, and/or an explanation of their writing process along with the finished paper**

- **Ask students direct questions about what they wrote**

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Actions You Can Take cont.

- **Use unique and/or class-based assignments (e.g., a field trip, archived materials, something shared in class, primary data, recent news [ChatGPT stops at 2021], videos/graphic aids)**

    - **Use social annotation tools (e.g. Perusall, Google docs)**

- **Use "paywalled materials" (accessible through the UMD library but not open access internet)**

- **Use a detection device (many are available)**

- **Create policy; cover it early and often, in class and on the syllabus**

- **Explain the value of writing (writing is thinking)**

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Detection Tools

- **GPT-2 output detector (https://openai-openai-detector.hf.space/)**

- **GLTR (Giant Language Model Test Room) (http://gltr.io/dist/index.html)**

- **GPTZero (https://etedward-gptzero-main-zqgfwb.streamlit.app/)**

- **Watermarking (coming soon)**

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Discussion Questions

1. Given your discipline/role at UMD, what are your concerns regarding ChatGPT/AI?

2. What opportunities, if any, do you see for using these tools?

3. Based on what you know so far, what do you plan to do regarding ChatGPT/AI going forward?

For a complete bibliography of sources on this subject, see Anna Mills' Google doc, compiled for the Writing Across the Curriculum (WAC) Clearinghouse, titled "AI Text Generators: Sources to Stimulate Discussion Among Teachers."

Mills' document is available through the KAML's ScholComm blog.

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