Responding to the Rise of Generative AI Tools

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GLOBAL EDUCATORS NETWORK

MARCH 24, 2023
Presentation Overview

- Overview of Generative AI
- What Writing Can Generative AI Currently Do?
- Qualities of Text Written by Generative AI
- Coming Soon: New Powers
- Responses to Generative AI in the Classroom
- Discussion
What is Generative AI?

- Uses a subtype of machine learning called large language models (LLM)
- Trained on petabytes of text data to predict associations of words
- This allows them to read, summarize, translate, and create texts as well as pictures, write code, and more
- Examples: ChatGPT (OpenAI), Bard (Google), Claude (Anthropic)
- Specially trained models: Bing Chat, Copy.ai, Jasper, Elicit, others
<table>
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<tr>
<th>Test/Metric</th>
<th>GPT-4 estimated percentile</th>
<th>GPT-4 (no vision) estimated percentile</th>
<th>GPT-3.5 estimated percentile</th>
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What Writing Can Generative AI Currently Do?

- Summarize texts
- Write outlines
- Create personal responses
- Write short essays
- Write poetry and short stories
- Write in different voices
- Revise and create multiple versions
- Answer exam questions
Qualities of Text Written by Generative AI

- Excellent grammar
- Creates structures that are basic but have logical organization
- Tends to produce formulaic, bland content; may lack specifics
- Can sound authoritative while giving incorrect information; “hallucinates”
- Often makes up plausible sounding but nonexistent sources
- Will not be detected by conventional plagiarism checkers
Analogies for Generative AI

- Autocomplete
- Calculator
- Co-Worker
Other Considerations

- Bias
- Different Levels of Cultural Capital and Familiarity with Technology
- Access/Cost
- Accessibility
Coming Soon

- Integration in word processing programs
- Better use of sources
- Integration with Internet
- More fine-tuned models for custom tasks
Responses to Generative AI in the Classroom

1. Forbid It
2. Work Around It
3. Allow It
4. Teach It
1. Forbid It

- Pros
  - Encourages students to do their own thinking
  - Possible stopgap measure before revising course materials in future

- Cons
  - Hard to enforce
    - AI detection is being developed but is not reliable (and never will be?)
    - Use of AI generally can’t be proven
  - Unclear lines
    - Is Grammarly allowed? Can students use AI for brainstorming? Getting feedback from AI?
  - Suggestions like handwritten essays aren’t realistic and equitable in most situations
2. Work Around It

- **Pros**
  - Encourages students to learn concepts and essential skills for themselves
  - May only require small changes to existing assignments

- **Cons**
  - May not be a long-term solution as AI gets more advanced
  - Depending on approach, may require more time to review assignments
  - Won't work in some situations
2. Work Around It: Examples

- Ask the students to include and engage with details from texts that have not been pervasively written on or cannot be accessed by AI
  - Obscure texts, texts behind paywalls, video, audio, class lectures
- Incorporate current events in assignments
- For reading responses, use social annotation rather than open ended questions
- Ask students to submit an audio file, podcast, video, drawing, diagram, or multimedia project.
3. Allow It

● **Pros:**
  ○ Reflects writing process outside of classroom
  ○ Requires less modification of assignments by instructor

● **Cons**
  ○ Students may not learn key concepts if they rely on AI tools
  ○ Inequities between students using AI tools and those not using them
3. Allow It: Examples

- Scaffolding and Reflection
  - Assign steps in the writing process and/or post-assignment reflection and require reflection at each step (brainstorming, outlining, drafting)
- Require students to identify parts of the assignment created by generative AI
4. Teach It

● Pros
  ○ Students are going to use AI tools so AI literacy is valuable
  ○ Allows students to see AI’s strengths and weaknesses
  ○ Centers critical thinking

● Cons
  ○ Rapid development of AI tools makes planning hard
  ○ Most of us are still learning about generative AI
  ○ May not align with course objectives or it may be another thing to fit in
Teach It: Examples

- Ask students to evaluate a response or essay produced by ChatGPT
  - Ask ChatGPT to define “social stratification” then consider what is emphasized, left out, etc.
  - Have students use Track Changes in Word to add depth, clarify misinformation, offer alternative perspectives, and make other improvements to ChatGPT output.
  - Have Chat GPT generate two outputs to the same prompt and have students compare them
- Have students ask ChatGPT for feedback on a draft of their assignment; students evaluate the feedback given
- Explore how the specific language in prompts produces different results
Final Thoughts

- Familiarize yourself with tools like ChatGPT. Try entering your assignment prompts and evaluate the output.
- Go back to your course learning objectives to consider them with generative AI in mind.
- Think about both short-term and long-term approaches.
- Whatever approach you take, include a clear policy statement in your syllabus and discuss expectations with your students.