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Link to keynote presentation slides

- I. Introduction to ChatGPT
- II. Prompt Engineering
- III. Educational Applications
- IV. Other Al Tools
- V. Concerns & Issues

I. Introduction and Background Resources

Key Questions and Explorations:

- How have you been using ChatGPT or other AI?
- What are your thoughts about ChatGPT's potential to disrupt education?
- What are your thoughts on the ethical concerns or security risks?
- Try a few searches in ChatGPT let's discuss the results

Resources:

- NYSCATE: An ongoing conversation about AI
- Five remarkable chats that will help you understand ChatGPT
- The future of writing in a world of artificial intelligence
- <u>Understanding ChatGPT and why it's even bigger than you think</u>
- A beginner's guide to AI in education (scroll to bottom and fill out the form)

II. Prompt Engineering and Educational Applications

Key Questions and Explorations:

- How can well-crafted prompts enhance personalized learning and critical thinking in educational settings?
- How can well-crafted prompts support real-time assessment and feedback in educational contexts?

- How can well-crafted prompts reduce educators' workload while enriching their teaching capabilities?
- What challenges and limitations should be addressed when drafting prompts?

Incremental prompting in ChatGPT (example):

- In ChatGPT:
 - Basic prompt: I want you to write the outline of a paper about the concept of surveillance in Shakespeare's Hamlet (Results)
 - Incremental prompting:
 - Tell me about the key theories of Michel Foucault.
 - Tell me more about Foucault's writings on the topic of surveillance.
 - Explain Foucault's theory of the panopticon.
 - I want you to write the outline of a paper about the concept of surveillance in Shakespeare's Hamlet. (Results)

Other Prompts to try:

- In ChatGPT I want you to act as an educational content creator. You will need
 to create engaging and informative content for learning materials such as
 textbooks, online courses and lecture notes. My first suggestion request is "I
 need help developing a lesson plan on renewable energy sources for high school
 students."
- In ChatGPT Generate a comprehensive 13-week introductory edtech course for university instructors to develop their knowledge and understanding of educational technologies & their application in the university classroom? Include questions and readings for each week and inclusion of a capstone project.
- Assess the following thesis statement with the rubric provided. Here is the thesis:
 "High school graduates should be required to take a year off to pursue
 community service projects before entering college in order to increase their
 maturity and global awareness." Use this rubric to assess the thesis statement:
 https://www.wsfcs.k12.nc.us/cms/lib/NC01001395/Centricity/Domain/1060/Thesis%20Statement%20rubric.pdf
- In ChatGPT Use your wit, creativity, and observational skills to create
 [adjective] math problems for [age-level] students. The math problems should
 involve [math topic] using references to [topics of interest, eg. pop culture]. Use
 the following student names [name a few students] and/or the teacher's name
 [teacher name].
- In ChatGPT Create a list of [#] writing prompts for [grade level] based on [topic].
- In ChatGPT Write a 500 character report card comment for a [grade level] student in a [adjective/s] tone. This student is exceeding the expectations for [topic/subject]. This student is [areas of success]. They are especially strong in [top area of strength]. And I'd like to see them [areas to keep working on].
- In ChatGPT Write a 500 character report card comment for a [grade level] student in a [adjective/s] tone. The student could strengthen their [action] of [topics and/or skills]. Recommend they consider the following: [resources, support options, or types of practice].

- In ChatGPT Create a worksheet for [ability-level] students with a list of sentences, each with a blank space where a vocabulary word is missing. The sentences should be grammatically correct and appropriate for [age-level] students. Provide a set of instructions, list of words, and a sentence containing a blank space where one of the words should be inserted. The student's task is to fill in the blank with the correct word from [provided list OR # of words based on topic]. Code a fully-working, HTML-based Flappy Bird game that can be run in Replit.
- In Midjourney - nature photography, macro shot of Kermit the Frog, extremely detailed, natural light –ar 16:9 –v 5
- In Midjourney Drake standing in a dimly lit club, with a bottle of champagne in his hand. He's wearing a black suit and tie, with a group of people partying in the background. hyper-realistic, photo-realistic, extremely detailed --ar 9:16 --upbeta

Resources:

- A crowdsourced list of "awesome ChatGPT prompts."
- Free prompt-engineering tips
- A spreadsheet of K12 related prompts
- A twitter thread on incremental prompting
- Midiournev documentation and user guide
- How can teachers use AI for good?

III. Other Al Tools

Key Questions and Explorations:

- With so many new Al tools emerging, how do we know which ones are good and safe to try?
- What are promising areas of development in the educational market for Al? What areas need support?

Resources:

- A searchable and categorized list of AI tools
- 600+ AI tools from AI Daddy
- OpenAl Playground
- GPT for Sheets (Chrome Extension)
- Descript

IV. Concerns & Issues

Key Questions and Explorations:

- How do we ensure that students do not become over-reliant on AI tools, maintaining their ability to think critically and creatively?
- How do we ensure privacy and data security for students while utilizing AI in education to prevent potential misuse and exploitation?
- How do we ensure that AI systems do not perpetuate or exacerbate biases in educational content or assessments, disadvantaging certain groups of students?
- How do we ensure equitable access to Al-powered educational tools for socioeconomically disadvantaged students to bridge the digital divide and reduce educational inequality?
- How do we ensure that Al-generated content is accurate, relevant, and appropriate for students' learning needs?
- How do we ensure that the teacher-student relationship remains strong and human interaction is valued, despite the integration of AI in education?
- How do we ensure that Al-based assessment tools accurately and fairly evaluate students' knowledge, skills, and understanding?
- How do we ensure ethical considerations, such as surveillance, consent, and the commodification of education, are addressed when implementing AI in education?
- How do we ensure that educators receive adequate training and support for integrating AI into their teaching practices to maximize effectiveness and minimize potential issues?

Resources:

- Open source data science: How to reduce bias in AI World Economic Forum
- The Problem With Biased Als (and How To Make Al Better) Forbes
- Will Al Chatbots Raise Digital Equity Concerns for Students? Government Technology
- ChatGPT Is a Blurry JPEG of the Web The New Yorker
- Don't Ban ChatGPT in Schools. Teach With It. The New York Times
- This 22-year-old is trying to save us from ChatGPT before it changes writing forever - NPR
- Ethical Considerations When Using Artificial Intelligence-Based Assistive Technologies in Education - Open Education Alberta
- Opinion: The Pros and Cons of Using Al in Schools Government Technology
- Al In The Classroom: Pros, Cons And The Role Of EdTech Companies Forbes