

Introduction to ChatGPT for Higher Ed

About this Document

- Author of Prompts: Judith Dutil (human)
- Author of Responses: ChatGPT (bot)

What is ChatGPT?

ChatGPT is a variant of the popular language model GPT-3 (short for "Generative Pre-training Transformer 3"), which was developed by OpenAI. It is a machine learning model that is trained to generate human-like text by predicting the next word in a sequence, based on the words that came before it. The goal of ChatGPT is to enable the creation of chatbots that can engage in natural, human-like conversations with users. It can be used to build chatbots for a variety of applications, including customer service, entertainment, and more. The model is trained on a large dataset of human conversation, so it is able to generate text that is similar to how humans speak and write.

What is OpenAI?

OpenAI is a research institute based in San Francisco, California that is focused on advancing artificial intelligence in a responsible and safe manner. Founded in 2015 by a group of high-profile tech leaders and investors, including Elon Musk and Sam Altman, OpenAI conducts research in a variety of areas related to artificial intelligence, including machine learning, robotics, and economics. The organization is known for developing a number of influential AI technologies, such as the language model GPT-3, which has been used to create chatbots and other natural language processing applications. OpenAI aims to promote and advance the field of AI in a way that benefits society and helps to mitigate potential negative consequences of the technology.

Explain the types of AI educators can use today.

There are several types of AI that educators can use today, including:

- Rule-based AI: This type of AI follows a set of pre-defined rules to perform a task. For example, a rule-based AI system might be programmed to grade multiple-choice exams by comparing the student's answers to a key.



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- **Expert system:** This type of AI is designed to replicate the decision-making abilities of a human expert in a specific field. An expert system might be used to help students diagnose a problem or recommend a course of action.
- **Machine learning:** This type of AI involves training a computer model on a large dataset, so that it can learn to make decisions or predictions based on patterns in the data. A machine learning system might be used to personalize learning for individual students, by adapting to their unique strengths and weaknesses.
- **Natural language processing:** This type of AI involves the ability to understand and generate human-like language. A natural language processing system might be used to facilitate communication between students and teachers, or to help students practice their language skills.
- **Robotics:** This type of AI involves the use of robots to perform tasks, such as assisting with hands-on experiments or providing additional support to students with disabilities.
- **Computer vision:** This type of AI involves the ability to analyze and understand images and video. A computer vision system might be used to assess students' work, or to provide feedback on their progress.

What type of content can students and educators create with AI?

There are many ways that students and educators can create content using AI, including:

- **Text generation:** AI can be used to generate written content, such as essays, articles, or reports. This can be especially helpful for students who are struggling to come up with ideas or who need assistance organizing their thoughts.
- **Data visualization:** AI can be used to create graphs, charts, and other visualizations of data, which can help students and educators better understand and communicate complex concepts.
- **Audio and video creation:** AI can be used to generate audio and video content, such as lectures, podcasts, or educational videos. This can be especially useful for students who prefer to learn through visual or auditory means.
- **Interactive experiences:** AI can be used to create interactive learning experiences, such as virtual labs or simulations, which can help students better understand difficult concepts.
- **Personalized learning:** AI can be used to create customized learning plans for individual students, based on their strengths, weaknesses, and learning styles. This can help educators create more effective and engaging learning experiences.
- **Translation:** AI can be used to translate written or spoken content into other languages, which can be especially helpful for educators working with a diverse student body.

Overall, AI has the potential to enhance and enrich the learning experience for both students and educators, by providing new and innovative ways to create and consume content.



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In what positive and negative ways can ChatGPT evolve over time?

There are both positive and negative ways that ChatGPT and similar chatbot technology could evolve over time:

Positive:

- Improved natural language processing: As ChatGPT and other chatbots are exposed to more and more examples of human language, they may become better at understanding and generating human-like text. This could lead to more natural and engaging conversations with users.
- Increased functionality: ChatGPT and other chatbots may be able to perform a wider range of tasks and functions over time, such as providing customer service, assisting with language translation, and more.
- Enhanced personalization: As ChatGPT and other chatbots learn more about individual users, they may be able to provide more personalized and customized experiences, such as recommending products or providing personalized recommendations based on a user's interests.

Negative:

- Misuse or abuse: ChatGPT and other chatbots may be used for malicious or unethical purposes, such as spreading misinformation or engaging in cyberbullying.
- Reduction of human interaction: As chatbots become more sophisticated, there is a risk that they may replace human interactions in certain contexts, leading to a loss of social skills or human connection.
- Bias: If ChatGPT and other chatbots are trained on biased or unrepresentative datasets, they may produce biased or unfair results, which could have negative consequences for individuals or groups.

Overall, the evolution of ChatGPT and other chatbot technology has the potential to bring both positive and negative impacts, and it is important to be aware of these potential consequences as the technology develops.

How can college educators use ChatGPT?

There are several ways that college educators can use ChatGPT or similar chatbot technology:



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- As a teaching assistant: ChatGPT can be used to answer student questions and provide assistance with course material outside of class time, freeing up the instructor's time for other tasks.
- For grading and feedback: ChatGPT can be trained to provide feedback on student assignments, such as essays or problem sets. This can save time for instructors and provide students with more timely feedback.
- As a conversation partner: ChatGPT can be used to facilitate conversation practice in language learning courses. Students can have conversations with the chatbot in the target language and receive immediate feedback on their language use.
- For research: ChatGPT and other language models can be used by educators for research purposes, such as studying how humans communicate or how language changes over time.

Overall, chatbots like ChatGPT can be a useful tool for college educators to save time, provide assistance to students, and facilitate learning in a variety of contexts.

How can ChatGPT be used for lesson planning?

There are a few ways that ChatGPT or similar chatbot technology can be used for lesson planning:

- As a resource for finding and organizing content: ChatGPT can be trained on a specific topic or subject area and can be used to search for and organize relevant content for a lesson plan.
- For generating lesson plan ideas: ChatGPT can be used to generate ideas for lesson plans based on a particular topic or theme. For example, an instructor could provide ChatGPT with a list of learning objectives and have the chatbot generate a list of possible activities or exercises to include in the lesson plan.
- As a tool for creating personalized learning experiences: ChatGPT can be used to create personalized learning experiences for students based on their individual needs and interests. For example, an instructor could use ChatGPT to generate customized lesson plans for each student in the class.

Overall, ChatGPT and other chatbot technology can be a useful tool for educators to save time and create effective, engaging lesson plans for their students.



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What do college educators need to know about ChatGPT?

There are a few things that college educators should know about ChatGPT and similar chatbot technology:

- ChatGPT is a machine learning model that is trained to generate human-like text by predicting the next word in a sequence based on the words that came before it.
- ChatGPT is designed to engage in natural, human-like conversation with users. However, it is important to remember that ChatGPT is not a human and may not always understand or respond appropriately to certain comments or questions.
- ChatGPT and similar chatbots can be a useful tool for college educators to save time and provide assistance to students. However, it is important for educators to use these tools in a way that complements, rather than replaces, human interaction and instruction.
- ChatGPT and other chatbot technology are still evolving and may have limitations. It is important for educators to be aware of the capabilities and limitations of these tools and to use them appropriately.

How can college students use ChatGPT?

There are several ways that college students can use ChatGPT or similar chatbot technology:

- As a study aid: ChatGPT can be trained on a particular subject or course material and can be used to answer questions and provide assistance with homework and other assignments.
- For conversation practice: ChatGPT can be used to practice conversation in a foreign language or to improve communication skills in general.
- As a writing tool: ChatGPT can be used to generate ideas for writing assignments or to provide feedback on written work.
- For research: ChatGPT and other language models can be used by students for research purposes, such as studying how humans communicate or how language changes over time.

Overall, ChatGPT and other chatbot technology can be a useful tool for college students to save time, improve their language skills, and facilitate learning in a variety of contexts.



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- ChatGPT and other chatbot technology are still evolving and may have limitations. It is important for students to be aware of the capabilities and limitations of these tools and to use them appropriately.

How can educators avoid students cheating with ChatGPT?

There are several steps that educators can take to prevent students from using ChatGPT or similar chatbot technology to cheat:

- Make it clear to students that using chatbots to cheat is a violation of academic integrity policies and will not be tolerated.
- Educate students about the proper use of chatbots and other technology tools, and emphasize the importance of academic integrity.
- Monitor students' use of chatbots and other technology tools during exams and assignments.
- Consider using plagiarism detection software to identify instances of cheating.
- Encourage students to seek out legitimate resources and support for their coursework, rather than relying on chatbots or other unethical means to complete assignments.

Overall, it is important for educators to be proactive in preventing cheating and to communicate clearly with students about the expectations and consequences for academic integrity.



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Is ChatGPT assistive technology?

GPT (short for "Generative Pre-trained Transformer") is a machine learning model that was developed by OpenAI. It is not an assistive technology, but rather a natural language processing (NLP) model that can generate human-like text. It is not designed to assist people with disabilities, but rather to perform language-related tasks, such as language translation, summarization, and text generation.

How should students cite text generated by ChatGPT?

If you are using text generated by ChatGPT or any other language model in a research paper or other academic work, it is important to properly cite your sources. Here are a few guidelines for citing text generated by ChatGPT:

- Include the name of the chatbot in the citation, along with any relevant information about the version or specific model used.
- Indicate that the source is a chatbot, rather than a human author.
- If you used the chatbot to generate ideas or text for your own work, be sure to clearly distinguish the chatbot's contributions from your own.

Here is an example of how you might cite text generated by ChatGPT in a research paper:

"According to ChatGPT (OpenAI, 2021), the use of chatbots in education has the potential to save time and improve learning outcomes. However, it is important to use chatbots in a way that complements, rather than replaces, human interaction and instruction" (Source: ChatGPT, OpenAI, 2021).

It is always important to follow your instructor's guidelines and any specific citation style requirements for your assignment. If you have any questions about how to cite text generated by ChatGPT or other language models, be sure to ask your instructor for guidance.

How can plagiarism from a chatbot be detected?

There are a few ways that plagiarism from a chatbot can be detected:



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- Use plagiarism detection software: Plagiarism detection software, such as Turnitin, can be used to identify instances of copied text in a document. The software compares the text in the document to a database of previously published materials and can identify instances of plagiarism.
- Check for unusual patterns or language: Chatbots are designed to generate human-like text, but they may still produce text that is distinctively different from human-written text. For example, the text generated by a chatbot may contain unusual word combinations or sentence structures that are not typical of human language.
- Look for a lack of attribution: If text generated by a chatbot is used in a research paper or other academic work, it should be properly cited and attributed to the chatbot as the source. If no attribution is provided, this could be an indication of plagiarism.

Overall, it is important for educators to be vigilant in detecting and preventing plagiarism, including plagiarism from chatbots or other sources.

What is machine learning bias and how does it affect education?

Machine learning bias refers to the systematic ways in which a machine learning model can produce biased or inaccurate results. This can occur when a model is trained on a biased or unrepresentative dataset, which can lead the model to make biased or unfair decisions or predictions.

In education, machine learning bias can have a number of negative consequences. For example, if a machine learning model is used to evaluate student performance or predict academic success, and the model is trained on a biased dataset, it may produce biased or unfair results. This could lead to unequal opportunities or outcomes for students, or result in incorrect or unfair assessments of student performance.

It is important for educators to be aware of the potential for machine learning bias and to take steps to minimize it. This can include using diverse and representative datasets to train machine learning models, as well as regularly evaluating and testing the models to ensure that they are producing fair and accurate results.

Write a paragraph and works cited list about breeds of parrots using APA citation.

There are many different breeds of parrots, each with its own unique characteristics and features. According to the World Parrot Trust (2022), some popular breeds include African grey parrots, which are known for their intelligence and ability to mimic human speech, and macaws,



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which are known for their bright, colorful feathers. Other popular breeds include Amazon parrots, cockatoos, and conures. Parrots are intelligent and social animals, and they can make great pets for people who are willing to devote time and effort to caring for them. However, it is important to research and choose the right breed for your lifestyle and ability to meet the needs of the specific type of parrot you are interested in (World Parrot Trust, 2022).

Works cited:

World Parrot Trust. (2022). Breeds of parrots. Retrieved from <https://www.worldparrottrust.org/information-parrots/breeds-of-parrots>

In what creative ways can ChatGPT be used in the classroom?

There are many creative ways that ChatGPT and other chatbot technology can be used in the classroom:

- As a conversation partner: ChatGPT can be used to facilitate conversation practice in language learning courses. Students can have conversations with the chatbot in the target language and receive immediate feedback on their language use.
- For generating writing prompts: ChatGPT can be used to generate ideas for writing assignments or projects.
- As a tool for creating personalized learning experiences: ChatGPT can be used to create personalized learning experiences for students based on their individual needs and interests. For example, an instructor could use ChatGPT to generate customized lesson plans or activities for each student in the class.
- For group discussions: ChatGPT can be used to facilitate group discussions by posing questions or prompts to stimulate conversation and critical thinking.
- For research projects: ChatGPT and other language models can be used by students to generate ideas for research projects or to assist with data analysis.

Overall, ChatGPT and other chatbot technology can be a useful and engaging tool for educators to facilitate learning and facilitate student engagement in the classroom.

Provide an example of a creative math assignment for a college-level math course.



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Here is an example of a creative math assignment for a college-level math course:

Title: "Math in Art"

Objective: To explore the use of math in art and to apply mathematical concepts to create original artworks.

Assignment:

- Research the use of math in art, including examples of artists who have used math in their work.
- Choose a mathematical concept (such as symmetry, tessellation, or the golden ratio) and use it as the basis for creating an original artwork. This could be a drawing, painting, sculpture, or other medium.
- Write a short paper explaining how you used the chosen mathematical concept in your artwork and how it contributes to the overall design and aesthetic of the piece.
- Present your artwork and paper to the class, explaining your creative process and the mathematical concepts involved.

This assignment combines creative expression with the application of mathematical concepts, allowing students to explore the intersection of math and art in a fun and engaging way. It can be adapted for a variety of math courses, depending on the specific mathematical concepts being covered.

Provide an example of a creative history assignment for a college-level history course.

Title: "Time Traveling Historian"

Objective: To explore the past and present of a specific place or event and to present the findings in a creative and engaging way.

Assignment:

- Choose a specific place or event in history and research its past and present. This could be a city, a landmark, a historical event, or any other subject of interest.
- Create a timeline of the place or event, including important events, people, and changes over time.



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- Using the timeline as a guide, create a "time travel" video or presentation in which you "visit" the place or event at different points in history. This could include reenactments, interviews with "historical" figures, and other creative elements.
- Present your "time travel" video or presentation to the class, explaining the historical context and significance of the place or event.

This assignment allows students to explore a specific place or event in depth and to present their findings in a creative and engaging way. It can be adapted for a variety of history courses, depending on the specific time period or subject being covered.

Create a grading rubric for the Time Traveling Historian assignment.

Here is a sample grading rubric for the Time Traveling Historian assignment:

Content (60%):

- Accurately and thoroughly presents the historical context and significance of the chosen place or event (20%)
- Clearly and effectively illustrates the changes and developments over time (20%)
- Demonstrates a strong understanding of the historical sources and methods used in the research (20%)

Creativity (30%):

- Uses a variety of creative elements to bring the place or event to life (10%)
- Engages the audience through the use of interactive or immersive techniques (10%)
- Demonstrates originality in the presentation of the material (10%)

Delivery (10%):

- Clearly and confidently presents the material to the audience (5%)
- Engages the audience through eye contact and appropriate use of voice and body language (5%)

This grading rubric can be used to evaluate the Time Traveling Historian assignment, taking into account the accuracy and depth of the historical content, the creativity of the presentation, and the delivery of the material to the audience. It can be modified or adjusted as needed depending on the specific requirements and goals of the assignment.



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Create an assignment for students to explore the efficacious use of ChatGPT.

Title: "Evaluating ChatGPT"

Objective: To evaluate the effectiveness and appropriateness of using ChatGPT or similar chatbot technology in various contexts.

Assignment:

- Research the capabilities and limitations of ChatGPT and other chatbot technology.
- Choose a specific context or task (such as customer service, language learning, or data analysis) in which ChatGPT or a similar chatbot could be used.
- Develop a plan for using ChatGPT or a similar chatbot in the chosen context or task, including specific goals and objectives.
- Implement the plan, using ChatGPT or a similar chatbot to assist with the chosen task or context.
- Evaluate the effectiveness and appropriateness of using ChatGPT or a similar chatbot in the chosen context or task. This could include assessing the chatbot's performance, as well as considering any ethical or societal implications of using the technology.
- Write a report summarizing your findings and conclusions about the use of ChatGPT or similar chatbot technology in the chosen context or task.

This assignment allows students to explore the capabilities and limitations of ChatGPT and other chatbot technology and to evaluate their efficacy in a specific context or task. It encourages critical thinking and analysis, as well as consideration of the ethical and societal implications of using this technology.

Create a lesson that helps students learn the consequences of failing to think for themselves.

Response 1

Here is a possible lesson plan for teaching students about the consequences of failing to think for themselves:



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- Begin the lesson by introducing the concept of critical thinking and why it is important. Explain that critical thinking involves evaluating information and ideas objectively, and making decisions based on evidence and logical reasoning.
- Ask students to think about a time when they made a decision without thinking critically about it. What were the consequences of that decision? How might the outcome have been different if they had taken the time to think critically about the issue?
- Next, provide students with a scenario in which they must make a decision without thinking critically. This could be a simple problem, such as deciding what to eat for lunch, or a more complex issue, such as deciding which college to attend. Have students discuss their decisions in small groups.
- Afterwards, have students reflect on the process of making a decision without thinking critically. Ask them to consider the consequences of their decisions and how the outcome might have been different if they had taken the time to think more deeply about the issue.
- Finally, ask students to brainstorm ways in which they can practice critical thinking in their everyday lives. This could include evaluating sources of information, asking questions, considering different viewpoints, and seeking evidence to support their ideas. Encourage students to make a commitment to thinking critically and to be aware of the consequences of failing to do so.

Response 2

Here is a possible lesson plan for teaching students about the consequences of failing to think for themselves:

- Begin by introducing the concept of independent thinking and why it is important. You could ask students to brainstorm a list of benefits of thinking for oneself, such as the ability to form one's own opinions and make informed decisions.
- Next, present students with examples of situations in which failing to think for oneself can have negative consequences. These could include blindly following authority figures or peer pressure, blindly accepting information without questioning it, or failing to consider multiple viewpoints.
- Engage students in a class discussion about these examples, asking them to consider how failing to think for oneself in these situations could lead to negative outcomes.
- To help students understand the importance of independent thinking, you could have them work in small groups to research and present on a historical or current event in which a lack of critical thinking had negative consequences.
- Finally, conclude the lesson by emphasizing the importance of developing the skill of independent thinking and encouraging students to actively practice it in their own lives.



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It may be helpful to provide students with strategies and techniques for cultivating critical thinking skills, such as questioning assumptions, considering multiple viewpoints, and evaluating evidence.



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