



An Empirical Study of Student Perceptions When Using ChatGPT in Academic Assignments

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Abstract. This research paper investigates students' perceptions of using ChatGPT, an AI-based language model, in academic assignments in a project management course. The study analyzes responses to an anonymous survey that explores the value, ease of use, extent of usage, and ethical considerations of using ChatGPT in homework. The results suggest that while most students find the tool helpful, they prefer to use it only as a supplementary resource. Students are concerned about actual learning and whether critical thinking skills can be successfully acquired when AI-based tools are used to generate essays. The survey reveals that student reaction teeters between acceptance and rejection. The paper concludes by assessing the deliverables from students and guides the informed use of tools such as ChatGPT in traditional college courses.

Keywords: AI Tools · ChatGPT · Teaching and Learning

1 Introduction

In the aftermath of ChatGPT's introduction in November 2022, every instructor and professor, regardless of their primary discipline, is suddenly facing a new reality—do we embrace generative AI Tools in our courses or ban them outright? Plagiarism was evidently a big risk and was being raised all around in academia. Even though many promising tools to detect the use of tools like ChatGPT emerged on the horizon, none of them provided the ironclad guarantee that educators need when assessing student deliverables. It was clear by early 2023 that banning such tools would not be a workable strategy. Faced with this new reality, faculty in individual departments and programs were left to use their best judgment to address such tools within the context of their coursework.

In this paper, we provide details of how ChatGPT was used in an assignment. We follow it up by testing two hypotheses – a) an assessment of student perception of its use in academic coursework and b) the ethical use of ChatGPT for learning. The paper will contribute to the emerging knowledge on using AI Tools in academic work.

1.1 AI and ChatGPT

Before addressing how to adapt and work with the new reality, let us introduce AI and describe how ChatGPT works. AI stands for artificial intelligence; from our context, it is intelligence captured in software and exhibited by it. The Oxford Dictionary defines intelligence as “the ability to acquire and apply knowledge and skills.” With human beings, this process begins very early on. Babies recognize objects and learn to communicate and manage them early in life. They begin building a vocabulary database to obtain what they seek early on. It is inevitable that as they become adults, their vocabulary and natural intelligence will be impressive. Since the earliest AI systems were designed, our goal has been to mimic human beings’ generative and conversational intelligence. IBM’s Watson, one of the earliest successful AI systems, claims it is one of the first AI chatbots—that it is easy to use and that Watson understands natural language and human conversation very well [1].

This is an excellent segue to introducing ChatGPT. According to Open AI the vendor for this product, this AI tool should be known as “Chat with GPT”. Its strength is its competency as an interactive chatbot that uses artificial intelligence to generate human-like responses to user input.

GPT stands for Generative Pre-trained Transformer. The term Generative implies that words are generated, Pre-trained because the AI system needs to digest tons of data and information from provided databases. Transformers provide impressive text generation to image creation abilities. Transformers improved upon the previous generation of neural networks—known as recurrent neural networks—by including steps that process the words of a sentence in parallel rather than one at a time, making them faster [2]. In other words, the ChatGPT transformer does not process words sequentially, one at a time, but instead processes the entire input simultaneously. Due to this and the thousands of hours engineers invested in fine-tuning and training the GPT models, ChatGPT can answer any query you ask fluently. This is the perfect time to state that not all its responses are accurate or truthful. The term hallucination describes the state in which a GPT gives completely incorrect responses.

1.2 Understanding GPTs

GPT uses machine learning techniques to analyze sizeable human language datasets and generate contextually appropriate and linguistically sophisticated responses. The core of an A.I. program like ChatGPT is a significant language model: an algorithm that mimics the form of written language. Let us trace ChatGPT to a case study vividly described as Baby GPT by Bhatia see [2]. In this article, a BabyGPT—which has no data at all, to begin with, is pre-trained by reading the complete works of Jane Austen. It trains, encodes, or learns just the 800 thousand words in the provided text—and nothing else. After the first iteration of training, Baby GPT produces total gibberish when asked to answer or auto-complete the prompt: “You must decide for yourself,” said Elizabeth.

Before training: Gibberish. But after 500 rounds—or about a minute on a laptop—it can spell a few small words such as the following the sample text:

“You must decide for yourself, said Elizabeth, ra but riteand the uth this hat say not shnd she for the seer refer of in he he was atte..” [2].

After 30,000 rounds, an hour into its training, BabyGPT is learning to speak in full sentences even though some of the generated sentences do not make sense:

“You must decide for yourself,” said Elizabeth, rather repeatedly; “that is very agreeable displeasure, they will ever be a lively young woman as it will be more disagreeable.” [2].

In just an hour of training on a laptop using *nanoGPT*, the language model created by Andrej Karpathy, went from generating random characters to a very crude approximation of language.

Other tools like Google’s Bard and ChatGPT 4 are currently available. However, our paper focuses on ChatGPT 3 as it is freely available, and students have ready access to it. GPT-3 is very powerful—it has 175 billion parameters, making it a potent language model. This model demonstrated impressive performance on various natural language processing tasks and has been used in various applications, including chatbots, language learning tools, and content creation platforms.

1.3 ChatGPT in Education

Academics and practitioners have started exploring the use of ChatGPT for research and real-world applications [3–9]. When we started researching this topic, only a few papers were available. Newspapers and Media headlines were the sources to go to for an understanding of the role of ChatGPT and education. Since then, a search of Google Scholar reveals an explosion of work done with ChatGPT. The papers reflect a rich variety as well, such as: “Education in the era of generative artificial intelligence (AI): Understanding the potential benefits of ChatGPT in promoting teaching and learning”,

“ChatGPT for education and research: A review of benefits and risks.”, “Role of ChatGPT in education.” or “What is the impact of ChatGPT on education? A rapid review of the literature” [17–20].

Beth McMurtrie, in her blog in the Chronicle of Higher Education [21] describes how academia reacted to a semester of dealing with generative AI, “Some faculty members enthusiastically embrace a future in which these programs become part of everyday life, because they can help reduce time on routine tasks, function as a personal tutor, or kick start ideas for essays and research papers. Many—including some of these AI enthusiasts—are deeply worried that students have been handed a powerful tool that comes without a training manual, so there’s no way to tell whether it’s producing insights or inaccuracies. They also fear that students may become willing to cede the difficult work of critical thinking and analysis in favor of a time-saving device that can churn out a quick discussion post or essay.” In this paper, we refrain from further expanding on the significance of generative AI in education as it is out of scope. However, the above makes it evident that ChatGPT will be a critical tool to explore in academia.

2 Using ChatGPT for Research and Assignments

In this section, we describe how and why ChatGPT was introduced to students to assist them with their assignments. The earliest media stories fascinatingly described the potential and ability of ChatGPT to pass exams. Evaluating ChatGPT's ability to solve higher-order questions on the competency-based medical education curriculum in medical biochemistry, Ghosh & Bir demonstrated research results indicating that ChatGPT has the potential to be a successful tool for answering questions requiring higher-order thinking in medical biochemistry [5]. ChatGPT has passed several exams in different fields, including law, business, and medicine. For instance 2023, ChatGPT passed a law exam at the University of Minnesota Law School, a business exam at the Wharton School of Business, and a clinical reasoning exam at Stanford Medical School [10].

Our own research providing ChatGPT tests and assignments from previous semesters yielded remarkable results. In each case, ChatGPT scored very good to excellent grades. With such promising results, we decided to unbridle the use of ChatGPT for student use in assignments.

A range of emotions swelled in academia early in our semester, ranging from “ban the use of AI” to “embrace it.” There were good points made for each sentiment. But advances in the field were moving at breathtaking speed. After substantial research and brainstorming with colleagues, it was evident that the use of ChatGPT in courses I coordinated needed to be addressed.

With headlines such as *ChatGPT is about to revolutionize the economy. We need to decide what that looks like* (MIT Technology Review) [11]; we indeed decided to move forward to encourage students to leverage the use of ChatGPT in their assignments.

The following two points prevailed in motivating our approach to allow the use of ChatGPT by students in their classwork.

- As documented earlier, GPT was undoubtedly intelligent—passing exams across disciplines with flying colors. So, why not allow students to tap into GPT as a research tool? Instead of doing a Google search and synthesizing the links, students can now obtain a preliminary overview of the research topic associated with the assignment. ChatGPT is highly versatile at brainstorming, which is not possible with results from search engines.
- A second consideration is the reality of student life. Widely known as *student syndrome*, it refers to planned procrastination, when, for example, a student will only start to apply themselves to an assignment at the last possible moment before its deadline [12]. GPT can amplify abilities and productivity equally for beginners, experts, and everyone in between—given a request for any information that you might ask a human assistant, GPT comes back instantly with an answer that is likely between good and excellent, enhancing productivity [13] if students are prone to last-minute research and might do a sloppy job, why not provide them access to an AI researcher—ChatGPT, in this case, to function as their research partner. Group projects have strengths, but many assignments must be completed individually. So ChatGPT can be that silent “artificial” coach, mentor, or team member.

2.1 Introducing ChatGPT

A private remark by a student concerning ChatGPT, which was alarming, moved me:

“Professor, my friend got 10/10 on an assignment, while I got 8/10. He used ChatGPT, and I did not.”

It was implied that this student got a better grade due to the use of AI and this was unfair.

To provide a level playing field, I identified a business analysis assignment in my project management course that could leverage the use of ChatGPT. Details of the course are provided below:

University: Boston University

Course: AD 642 Project Management

Discipline: Administrative Sciences (Business/Management)

Nature of Assignment: Complete a Business Case – especially a financial case for investing in a project. ROI and NPV calculations were done. Budget calculations were derived from MS Project estimates of work packages.

With an assignment identified, the first inquiry on this topic was to determine what percentage of the students are familiar with ChatGPT. A show of hands in the classroom in mid-February 2023 revealed that less than 50% of the students were familiar with or were actively using ChatGPT. Therefore, the next step was to tutor students to create accounts and demonstrate the use of the tool. This was a straightforward process. Students quickly created accounts via the URL <https://chat.openai.com> and typed in sample queries.

The next task was to describe how to cite the work. This proved to be a challenge for us. We use the APA style for citation, and as of mid-February 2023, there was no homogenous recommendation for APA citation. But, after some research, example styles were given to students to use in their assignments.

2.2 Prompt Tutorial

Since many students were new to AI tools, an introductory tutorial to prompt ChatGPT was provided. The prompts pertain to a business case analysis for a scenario that all students are familiar with – investing in higher education. Students were asked to reflect on their education and provide a financial analysis from a pre-mortem perspective. The final deliverable was a business case. Students were asked to personalize to the real-life scenario as much as possible to prevent the risk of a generic submission from ChatGPT. They were asked to conduct research about the job market in the country they came from and most likely returning to for employment.

The Table below describes a few sample prompts explored in class (Table 1).

Table 1. Key Domain Tasks Addressed in Revised Project

Introduction	Prompt: “Research the background, purpose, and overall context of pursuing a master’s degree in the USA and summarize your findings to set the stage for the business case.”
Market Overview	Prompt: “Analyze the demand for master’s degree holders in the USA job market, focusing on specific industries and sectors Include trends and statistics that support your analysis using a tabular format.”
Cost Analysis	Prompt: “Identify the costs associated with obtaining a master’s degree in the USA, including tuition fees, books, and health insurance.”
Financial Benefits	Prompt: “Determine the financial benefits of obtaining a master’s degree in the USA, such as salary increases, job opportunities, and promotion potential. Provide data that demonstrate these benefits and compare them to those who do not hold a master’s degree.”

2.3 Research Hypothesis

A research hypothesis was identified to test if the goal of introducing ChatGPT in the assignment was successful and to answer other questions pertaining to ethical use of ChatGPT in education.

Hypothesis: Using ChatGPT in academic assignments positively influences student learning outcomes in the classroom.

The simple hypothesis can be tested through a survey and analysis of the data from the responses. Grades and other qualitative student feedback would also be examined to validate that the learning outcomes were achieved.

A more intriguing hypothesis we need to address is whether using ChatGPT as a tool is ethical. The traditional learning acquisition processes, that is, “the human ability to think, to reason, to plan, to perceive, to adapt, and to perform induction, deduction, logic as well as to communicate, all ordinary abilities of human intelligence might not possibly be employed” when we use ChatGPT [14]. What is students’ reaction to learning and doing academic work using AI? It is surely a paradigm shift from the traditional way of conducting research. We need to research if students have varying reactions to the use of ChatGPT in academic work and how they perceive its use as a research tool.

Hypothesis: Students’ perceptions of using ChatGPT as an academic tool are affected by ethical concerns as this learning mode is a departure and a paradigm shift from the traditional research methods.

This hypothesis can be tested through a simple survey asking students to what extent they consider ChatGPT ethical (from a learning perspective).

3 Survey

A simple survey was designed to test the hypothesis. See Appendix A for details. A key point to note is that the survey was made anonymous. The anonymity of the survey was meant to encourage honest responses from students. The survey asks students what percentage of their assignment effort came from ChatGPT – this is a reasonable question to gauge the level of contribution from ChatGPT. This information can help provide insight into how heavily students rely on ChatGPT to complete their assignments.

Essentially, the survey instrument aims to test the hypothesis that AI tools such as Chat GPT are helpful for academic research and assignment work. Within this context, we were curious to find out if students were using output from the GPT as is or modifying it. If it is providing accurate responses, much re-prompting might not be necessary. Our goal was to collect information on that as well. Did they prompt more than once? Twice? More than Three times.

A second hypothesis that we tested was the ethical aspect of using ChatGPT.

The final question is open-ended and seeks their frank input. Students are more likely to share their true thoughts and experiences without fear of retribution or judgment if the survey is anonymous.

4 Survey Results and Findings

The study's results are shown below. The comprehensive feedback from our survey respondents provided invaluable insights into using ChatGPT for homework assignments. The data sheds light on the perceived value of ChatGPT as a study tool, the ease or difficulty of eliciting helpful content when using ChatGPT, the extent to which ChatGPT-generated text was incorporated into final papers, and the ethical considerations surrounding its use. What is insightful is the students' additional comments –they offer a rich understanding of their experiences and attitudes toward ChatGPT, both positive and negative.

In the following paragraphs, we will delve into the specifics of these responses, discussing our observations and interpreting the implications of these findings. We have left the pie charts from Google Forms results as-is for convenience. The Bar charts could have illustrated the same more intuitively. The survey was anonymous, and students answered selectively.

For the first question, “*How would you rate the overall value of using ChatGPT in your homework assignments?*”.

- Extremely valuable: 4 respondents
- Very valuable: 14 respondents
- Moderately valuable: 11 respondents
- Slightly valuable: 6 respondents (Fig. 1)

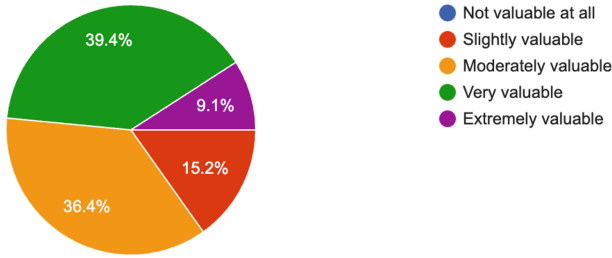


Fig. 1. Overall Value of ChatGPT

Comments: Most respondents found ChatGPT valuable for their homework assignments, with most rating it as either “very valuable” or “moderately valuable.”

Was it easy to prompt ChatGPT to generate helpful content for your assignments? Or did you try several times before you got the correct output?*

- Prompted once: 6 respondents
- Tried variations (two times): 16 respondents
- Tried three times or more: 9 respondents (Fig. 2)

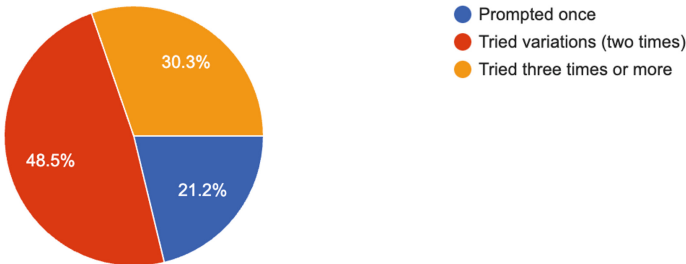


Fig. 2. Prompt Attempts to Obtain Desired Output

Comments: Many users needed to try at least a couple of times to get the desired output from ChatGPT for their assignments. Most respondents tried variations of prompts twice, while many had to try three or more times. ChatGPT gives impressive results on the first attempt in most cases. But it is possible that students tried a variation of the professor’s suggested prompts.

Approximately what percentage of the content in your final paper includes direct quotes or paraphrases from ChatGPT-generated text?*

- 0%: 3 respondents
- 1–20%: 17 respondents
- 21–40%: 6 respondents
- 41–60%: 6 respondents (Fig. 3)

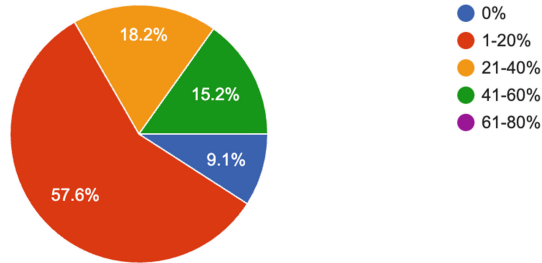


Fig. 3. Percentage Use of ChatGPT in Assignment

Comments: From these results, most respondents used a smaller portion of ChatGPT-generated text in their final papers, with most reporting 1–20% of the content as direct quotes or paraphrases. A smaller number of users relied more heavily on ChatGPT-generated content, with 21–40% and 41–60% usage reported by a few respondents. No respondents reported not using ChatGPT-generated content (0%) in their final papers. This suggests that while ChatGPT is a helpful tool for students, most users prefer it as a supplementary resource rather than a primary content source for their assignments.

To what extent do you consider using ChatGPT in your homework assignments ethical? (Focus is on learning perspective).

- Completely ethical: 5 respondents
- Somewhat ethical: 8 respondents
- Neutral: 15 respondents
- Somewhat unethical: 4 respondents
- Completely unethical: 2 respondents (Fig. 4)

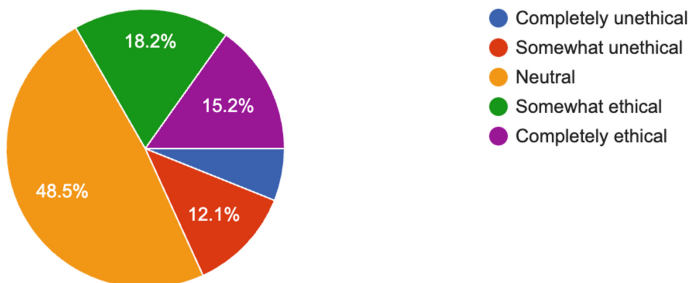


Fig. 4. Concerns About Using AI to Do Scholarly Work

Comments:

Almost a quarter of the students perceived the use of ChatGPT as unethical. With some strongly objecting to the use of ChatGPT. Note: This conversation occurred spontaneously in class when ChatGPT was introduced as a recommended tool.

Any comments on the use of ChatGPT in assignments?

While the previous questions did not allow students to provide feedback, this question succeeded in obtaining insight that revealed interesting student observations. We list the actual responses below, and for ease of comprehension, we have grouped them into two columns, as positive leaning or guarded comments in Table 2. Note: The comments in the two columns listed in the table are comments from different students.

Table 2. Comments From Students Grouped by Categories

Positive Leaning Comments	Guarded Comments
I think this assignment is useful to practice our prompt questioning and structuring for future ChatGPT use in courses	ChatGPT is not so helpful for me right now, compared to using Google search or Wikipedia
If one uses it to enhance their own work, it should be considered it's fine to use ChatGPT (for the future as well)	I worked more with Bard found it more intuitive. It can be implemented for easier navigation on research paper and sources
The use of ChatGPT can provide a higher value to the students, but only if the student already has some knowledge about the topic	AI can bring you some wrong information. The student must be able to determine if this information is right or wrong
I think ChatGPT is very useful. However, I believe that students cannot use it to write the entire paper. Honestly, I didn't fully use ChatGPT for the assignment	ChatGPT is a dangerous tool. It doesn't reflect the knowledge of the student. (i.e., it misrepresents how academically strong the student is. The assignment results seem to show that a student has strong skills when ChatGPT is used. Academically, this is unfair; it doesn't represent or show the person's critical mindset
It was helpful to come up with ideas Not a good response was obtained always, but somehow helpful	It was weird for us to have the "premade" prompts, as it takes away the critical thinking of the research. I think we should decide, our own prompts
Personally, I think chat GPT is helpful, providing ideas you never thought of before. Let students decide if not to use ChatGPT and when to use it	It has helped me a lot in my Business Analytics foundations course because I had no background knowledge in programming
It works great as a personal tutor. It is completely ethical and will be the new trend of academic learning. Soon, it will be as normal as people using Google today	For all student users, my advice is, just don't let ChatGPT dominate your ideas, and always keep your own thoughts
Every tool once launched in the world had questions of usage initially, whether it was Word, PowerPoint or Excel. Now, Chat GPT is a good tool for everyone as it makes searching simplified and easy	It should be used to understand and refer to but not rely on it fully. I think using ChatGPT is a big progress. It's not cheating, it's just a new tool
You need to learn how to train AI to get the answer you want. The education system needs to adapt ChatGPT	ChatGPT can provide a clear outline. Very helpful for getting actual facts and we don't have to waste time searching for information
Technology and Innovation cannot be disregarded, proper use of such things is necessary	In an assignment, ChatGPT can only be useful to some degree. It won't generally provide accurate or precise information that we can use in a paper. For my assignment it didn't generate precise info on foreign countries for example

(continued)

Table 2. (continued)

Positive Leaning Comments	Guarded Comments
Using ChatGPT can help to complete the assignments to a certain extent and improve efficiency. However, it's also important that students are using ChatGPT in the right way	Although it was highly beneficial, preserving (developing) our critical thinking skills is equally important. Though using ChatGPT is kind of convenient and quick for generating content, it is still important to read some authentic articles about the information you need for the essay
ChatGPT is a very helpful tool and can help you with research your topic in-depth and can save time when compared to finding different sources individually. However, later you must read and verify the content provided and not simply just copy and paste	We must leverage the tool, but we should learn the material as well
It is a very helpful tool not only in doing homework but with professional projects too. And it will make research easier	
I used it for the brainstorming stage only	

5 Hypothesis Analysis

Hypothesis 1 was inferred from several questions and other informal comments from students. We can determine with a certain degree of confidence that using ChatGPT in academic assignments positively influences student learning outcomes in the classroom. The average class grade for this assignment compared to the previous year was 12% better. The reasons possibly included the following:

- a) Increased access to information about the subject matter: ChatGPT can quickly provide students with information on a particular topic (business case analysis involving financial analysis in our assignment), allowing them to learn more efficiently and effectively.
- b) Enhanced critical thinking skills: As students use ChatGPT to research and generate content, they might have evaluated other dimensions they did not think of—for example, the longer-term value of investing in education.
- c) Improved writing skills: Using ChatGPT to generate content, students were exposed to new vocabulary and writing styles, which helped help them improve their writing skills and resulted in a better paper.
- d) Engagement with virtual research: Using ChatGPT to generate content can make the research process more engaging and interactive for students, potentially leading to increased motivation and participation. Students were motivated to finish the assignment as they could visualize the final product.

As noted in student comments, a lot of work and preparation must occur before ChatGPT will be a helpful tool.

Hypothesis 2, we cannot conclusively determine from one single question in the survey. The survey indicates the respondents' general attitudes toward using ChatGPT in academic work. Note that there is a split in attitude, with approximately 25% in favor and 25% opposed with 50% neutral. A more comprehensive study design would

be required to test the hypothesis properly. This would involve a larger sample size, a broader range of questions, and more objective measures of academic performance.

Please note that while a larger sample size would have been preferable, the limited class size was a constraint in this case. However, we made efforts to ensure the reliability of the results by encouraging all students in attendance to complete the survey to form reliable research conclusions about the population.

6 Conclusion

The survey and informal conversation with students reveal that the students are quite impressed with the ability of ChatGPT to act as a research partner and help them in many ways. While we did not survey the role of ChatGPT as a tutor, this is a key aspect that needs to be explored further when we redesign the curriculum. For instance, the instructor is freed up from the responsibilities of explaining mundane terms but yet critical concepts, such as NPV or Discounted rate, to students. Ascione reports, “Tutoring has long been a dream of people in tech. This is something we’re already starting to see unfold [15]”.

An interesting observation that needs to be explored further is productivity or simply motivation provided by use of ChatGPT in the course. Unlike the previous semesters, we had students complete the homework on time and schedule. A skeletal output was generated from the prompts provided by the instructor to consider. So students had a head-start. Excuses such as “I have Covid, please give me another week” did not appear in our inbox this time. Therefore, an unexpected benefit of using AI tools is that it appears to help students overcome the *Student Syndrome*. As vividly stated by Hoffman [13], student syndrome is that students start work only when the deadline is approaching. ChatGPT helps the student successfully start and deliver much closer to the finish line than if they did not use generative AI tools.

We pride ourselves on introducing students to the latest academic tools and techniques. Generative AI represents yet another computational invention that can elevate a student’s distinctive capability in education. Therefore, introducing and demonstrating tools such as ChatGPT to students behooves us. Unfortunately, we open the floodgates in doing so, and there is no going back. It is not conceivable that students will see a working demonstration of ChatGPT and then not leverage it further for their research work to complete assignments. Therefore, an AI Policy must be documented in our courses to provide a level playing field.

Eventually, students will get good at using tools such as ChatGPT. The challenge for educators will then go beyond simply mentioning Chat GPT or Google’s Bard as a tool that can be used in the course. It means that from a pedagogical perspective, instructors must integrate AI into their curriculum. They can emphasize active and experiential learning and show students how to use AI tools and technology.

As anticipated, the research validates the debate about the “ethical use” of ChatGPT in education. Using GPT to do research and ethics. GPTs have limitations. They don’t learn facts or principles that let them use commonsense reasoning or make new inferences about how the world works. When you ask a question, it has no awareness or insights into your intent -- it’s not making factual assessments or ethical distinctions about the

text it is producing: it's simply making algorithmic guesses and more to compose in response to the sequence of words in your prompt [13].

Students consider using ChatGPT unethical to use. This aspect needs to be explored in considerable detail in future research. Not exercising the traditional approach to conducting research or homework was troubling to many students. It goes against students' and researchers' ability to learn and innovate. While they appreciate Generative AI they seem to have misgivings. There is also a concern about bias and misinformation. Consider the statement from Leandro Maciel [14] "In addition to this philosophical issue (about consuming output from AI), there are also unwanted effects such as the generation of misinformation, the dissemination of fake news, and even the promotion of plagiarism. ChatGPT consists of an associative system whose content is not generated by real knowledge. ChatGPT does not provide information checking (uneven factual accuracy) as well. The technology may generate incorrect information and may produce harmful instructions or biased content, as pointed out by the ChatGPT platform itself (Source: <https://openai.com/blog/chatgpt/>. Access on Feb. 14th, 2023.)

We conclude by giving ChatGPT the final word on the ethical use of ChatGPT for student assignments and what I must do next as instructor. I chose to prompt ChatGPT for a response to my question: *How do I react to the concern from a small segment that students should not be using ChatGPT to do assignments?* ChatGPT replies [16]. When addressing concerns from a segment of students who believe that using AI for the assignment is not appropriate, consider the following steps:

1. Acknowledge their concerns: Recognize the concerns raised by these students and emphasize that you appreciate their engagement and feedback.
2. Clarify the purpose of using ChatGPT: Explain the educational objectives behind incorporating ChatGPT into the assignment. The goal is to enhance the learning experience, improve research efficiency, and provide new perspectives rather than replace independent thinking or traditional research methods.
3. Highlight the benefits: Discuss the potential benefits of using AI-based tools like ChatGPT, such as saving time, generating new ideas, or providing a different perspective.
4. Set clear guidelines: Establish clear guidelines for using ChatGPT, including how to cite and credit any information obtained from the tool properly and verify the generated content's accuracy and reliability.
5. Encourage critical thinking: Emphasize the importance of developing critical thinking and problem-solving skills, and remind students that ChatGPT should be used as a supplementary tool rather than a substitute for their own thinking and analysis.
6. Provide alternatives: For students who remain uncomfortable with using ChatGPT, offer alternative research methods or resources they can use for their assignment.
7. Monitor and evaluate: Continuously monitor the use of ChatGPT in assignments, evaluate its effectiveness and impact on students' learning, and make adjustments as needed.

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