### CPS 412 ~ Assignment 1

# ChatGPT: Should Academia's Fastest Growing AI Tool be Allowed in Facilities of Higher Education?

Veronica Kastulin - 501170676

Varak Mesropian - 501168289

Carissa Larocque - 501164321

Dr. Omar Falou

04/01/2023

## Table Of Contents:

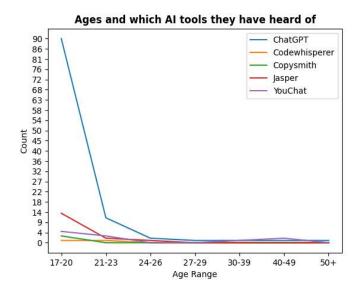
Introduction Pg. 2
Pros of ChatGPT Pg. 3
Cons of ChatGPT Pg. 4
Debatable Topic Pg. 5
Future of ChatGPT Pg. 6
Conclusion Pg. 7



Dr. Omar Falou

## ChatGPT: Should Academia's Fastest Growing AI Tool be Allowed in Facilities of Higher Education?

ChatGPT is an artificial intelligence chatbot developed by OpenAI and launched in November 2022 with the goal to imitate human conversation and interaction. Recently, it became quite a phenomenon in the academic world, when it grew in popularity as one of the most used tools in academia. Students turn to faster and more efficient ways of getting their work done and expanding their knowledge. Figures 1.1, 1.2 and 1.3 show the demographic breakdown of students who use a variety of tools.



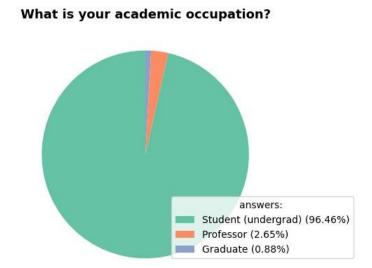
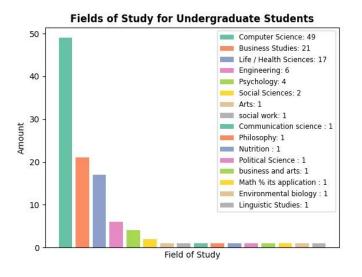


Figure 1.1 - Popularity of AI for given demographic Figure 1.2 - Academic occupations



These three graphs confirm that the majority of surveyed students that use ChatGPT are in computer science, business studies or health science.

Figure 1.3 - Fields of Study for Undergraduates

Dr. Omar Falou

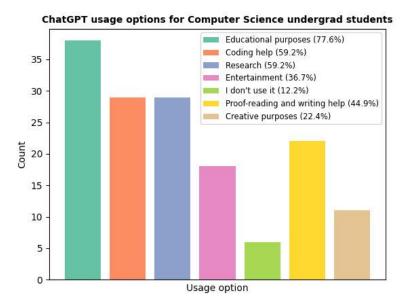


Figure 1.4 - Usage for Computer Science Students

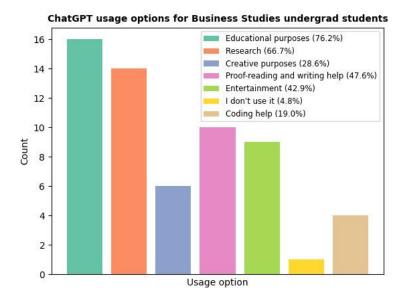


Figure 1.6 - Usage for Business Students

#### ChatGPT usage options for Life / Health Sciences undergrad students

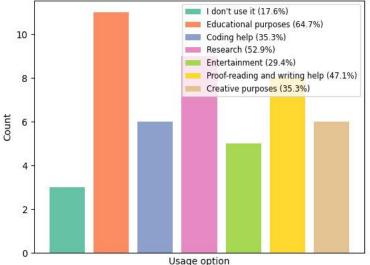


Figure 1.5 - Usage for Health Science Students

#### PROS OF ChatGPT:

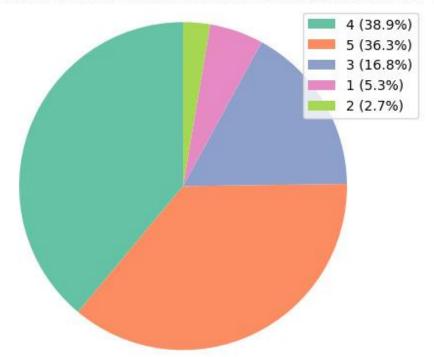
ChatGPT is a highly effective tool in education as it can answer practically any question. This makes it very versatile in topics of discussion and research. Figure 1.4, 1.5, 1.6 show that all three major disciplines use ChatGPT for education purposes, whether that be coding help, research or writing help. Proving that this technology can be used with different academic goals and provide students with a variety of services and resources.

In addition, this newly released AI technology is easy to use and saves students time. Due to this effective way of getting information, ChatGPT is very advantageous to people with attention disorders and other learning disabilities. According to our data in Figure 2.1, many agree with this point.

Dr. Omar Falou

Figure 2.1 - Viability of ChatGPT for helping disabled individuals via scale 1 - Not useful 5 - Very useful

Do you think ChatGPT could help students with different learning disabilities? (1 -> 5)



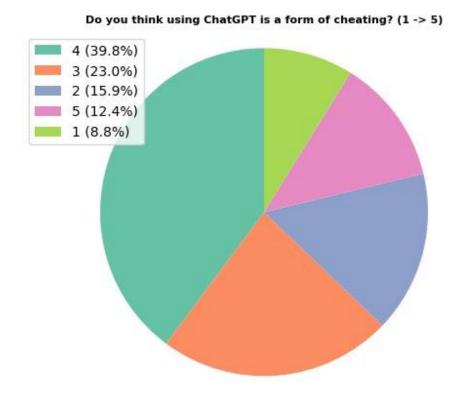
Over 60% agreed that students with different learning disabilities could benefit from this tool. In addition, this is supported by other studies done on the use of AI in schools. One study found that students with at least mild learning disabilities benefit from similar concepts (Hasselbring, T. S., & Williams Glaser, C.,H., 2000). AI powered word prediction software, now ubiquitous to every document editor, helped students learn which words come next as well as correct spelling. This, combined with the finding of the survey, shows that ChatGPT has the power to provide aid to students struggling with disability and their work.

#### **CONS OF ChatGPT:**

This AI chatbot has a lot of pros and advantages for students, but it also blurs the line between cheating, plagiarism and authentic work. According to the University of Oxford; Plagiarism is presenting work or ideas from another source as your own, with or without consent of the original author. ChatGPT generates text, based on the patterns and relationships it has learned from a large dataset. Meaning that the users do not write it themselves, correspondingly exposing students to AI-assisted plagiarism. That is why, it can also be considered cheating and a disadvantage to students who do not have access to such powerful and versatile tools or choose not to use them.

Dr. Omar Falou

Figure 2.2 - Opinions of whether ChatGPT is a form of cheating via scale 1 - Not a form of cheating 5 - Is a form of cheating



According to our census, Figure 2.2 shows that most students agree that the use of ChatGPT can be considered a form of cheating and puts some students at an academic disadvantage.

As of now, ChatGPT is free but ChatGPT-4; the latest update costs \$20 a month for subscribers and offers a variety of perks. This can be even more unfair for students with limited budgets.

Furthermore, from the ethical point of view, the use of ChatGPT goes against the 2nd formulation of the Kantianism theory, that is based on good will and rational decision making. By using this AI tool, students are using facts and information written by others and using it as a means to their end.

#### **DEBATABLE TOPIC:**

Having mentioned some of the pros and cons of using ChatGPT, there is a certain topic that sparks serious debate. Since its release, ChatGPT has been surrounded by controversy regarding the reliability and trustworthiness of its information. This concern is rooted in the way that ChatGPT was tested and what datasets it was trained on. ChatGPT is made to sound convincing with intricate wording but it may not produce accurate facts as it does not generate its answers by searching curated and verified sources. Instead, it uses models to make reasoning that sounds correct. However, the user has no way of verifying the validity of the sources. On the contrary, ChatGPT is an excellent tool for getting clarification on a certain topic, since the large datasets used in its creation can help form a general explanation. It is designed as a chatbot and not as a research tool, interacting with it as an idea generating tool proves to be very effective. Below is a summary of student's views on the reliability of ChatGPT.

Dr. Omar Falou

Figure 2.3 - Opinions on whether ChatGPT is a reliable source via scale 1 - Very unreliable 5 - Very reliable

Do you think that ChatGPT can provide you with unbiased and reliable information? (1 -> 5)

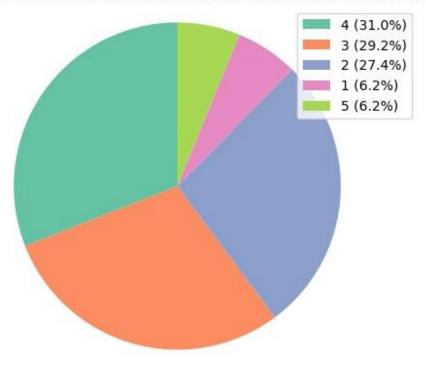


Figure 2.3 shows the even variance of opinions, proving that it is a debatable topic.

#### **FUTURE OF ChatGPT:**

AI technology is just at its infancy and it will evolve and become part of our lives in the future. ChatGPT has a lot of potential, OpenAI even discussed adding visual recognition features to visually assist their users based on a question and picture.

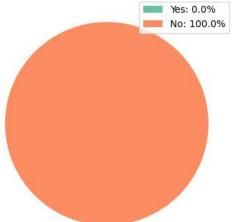
But at the moment, ChatGPT needs to address the reliability and sources of its information. For example, ChatGPT can cite sources, so that the users can verify the credibility of it. Since this tool is incredibly powerful and will continue to modify and enhance itself, it is imperative that everyone has free access to this resource.

In conclusion, AI tools have a valid place in students' tool bags, as it gets the work done quickly, is an advantage to those with learning disabilities and optimizes time spent on work. However, students have to be cautious of the possible plagiarism and inaccurate AI generated information. Figure 3.1 shows the professor's opinions on whether they should be harsher markers since students use AI text generator tools.

Dr. Omar Falou

Figure 3.1 - Professor's opinion on marking and ChatGPT

#### Do professors think it's fair to be harsher when AI generators do the work?

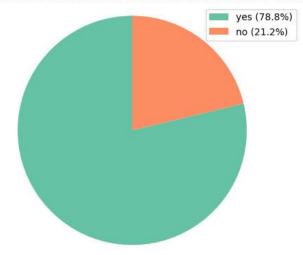


All professors disagreed with this statement, proving that using this tool does not demonstrate the extent of the student's knowledge and is only used as an aid. Students still have to edit, fact check and not solely rely on AI.

Figure 3.2 - Should universities allow the use of ChatGPT?

Do you think universities and schools should allow the use of ChatGPT?

Lastly, Figure 3.2 shows the students' opinion on the burning question of whether ChatGPT should be allowed in universities. 78.8% were for the use of the AI as an academic aid. However, restrictions and guidelines should be in place regarding the proper use of ChatGPT.



#### Bibliography:

Hasselbring, T. S., & Williams Glaser, C.,H. (2000). Use of computer technology to help students with special needs. The Future of Children, 10(2), 102-22. doi:https://doi.org/10.2307/1602691

### Appendix

Introduction	2
Figure 1.1-3	2
Figure 1.4-6	3
Pros of ChatGPT	3
Figure 2.1	4
Cons of ChatGPT	4
Figure 2.2	5
Debatable Topic	5
Figure 2.3	6
Future of ChatGPT	6
Conclusion, Bibliography	7
Figure 3.1-2	7