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WHY DO STUDENTS USE CHATGPT AND WHY DOES IT MATTER? Reflecting on the Use of AI in Higher Education

Abstract

Today, the educational discourse is closely tied to the concept of technological advancement that the 21st century is commonly associated with. The application of different types of online resources, virtual campus, , etc in the teaching-learning process by both educators and students has become an inseparable part of the global educational space that strives to maximally make the most of the technology to keep up with the fast-changing requirements of the modern labor market.

The most recent AI generated technology, ChatGPT has been rapidly gaining popularity among students of different Higher Educational institutions in different parts of the world, and they report having used the tool for multiple purposes while studying (Appleby, 2023). Against this background, it is also vital to look deeper into the real-time context in Georgia and investigate the students' perspectives and rationale for using it on the other side of the spectrum.

Therefore, this paper reports and explores the study conducted among 74 undergraduate students of Ivane Javakhishvili Tbilisi State University, Georgia, to investigate their practice of using ChatGPT in the educational process between 2022 and 2024 to customize their learning experiences.

The research findings will provide educators with useful food for thought at its initial stage to assist the compliance of the educational system with the newly emerged technological challenges such as ChatGPT and its adjustment to new teacher-learner needs.

Keywords: AI in higher education, ChatGPT, teacher-learner needs

1. Introduction

During the Covid-19 pandemic, higher education institutions faced a new challenge: they had to adapt rapidly to the new reality – move from face-to-face to online learning (mainly via Zoom). This rapid transition to online learning meant students' over-reliance on digital tools during the teaching process. Research has shown that students are trying to adapt to new technologies (Vargo et al., 2021). In addition, according to the McGraw Hill survey (2023), 81% of college students have changed their studying habits since the pandemic. Correspondingly, the AI chatbot which appeared shortly after the pandemic grabbed the students' attention. Therefore, it is of utmost importance to consider the AI chatbot's impact on the education system, in particular, how it can help or prevent people from gaining knowledge and developing necessary

study skills. One thing is obvious, the introduction of AI is on its way to interfering with the whole learning process and the increasing adoption of AI tools by higher education institution students is inevitable.

Not surprisingly, the use of AI-generated content for multiple purposes, mostly through ChatGPT, has already become popular among the students of many countries and Georgia is no exception. Having taught English for academic purposes at Tbilisi State University, Georgia, for over a decade, we have recently witnessed some students using ChatGPT in their writing classes, specifically for composing different types of essays. Within these classes, one of the primary objectives for us, instructors, is to teach our students effectively and develop their productive skills, such as speaking and writing through triggering creativity and critical thinking. The use of ChatGPT, however, makes us ponder about the whole teaching process and to what extent this AI tool (ChatGPT) will impact students' ultimate performance, their pragmatic fluency and their ability to comply with academic ethics.

Accordingly, this study aims to investigate and reflect on the practice of using ChatGPT among Georgian students by focusing on the underlying reasons they report for using the AI tool.

We assume that the findings of this study conducted among the undergraduate students of Tbilisi State University will be especially meaningful for the academia in Georgia, as ChatGPT most likely will remain with us for decades. Therefore, our society needs to be aware of its impact on students' learning objectives and outcomes and correspondingly, think of the ways how to effectively and appropriately handle it.

Considering the recency of the topic, there are not many studies done on the use of AI tools, particularly ChatGPT in higher education institutions. However, educators and researchers in the world leading universities have admitted that an innovation like this can cause potential complications and other undesirable effects alongside its promise to "enhance learning and reduce teacher workload" (Faculty of Education, Cambridge University. Retrieved from https://news.educ.cam.ac.uk/230403-chat-gpt-education February 8th, 2023).

2. Literature Review

2.1. Artificial Intelligence - ChatGPT in Higher Education

Artificial intelligence (AI) can be defined as the ability of computers or computer-controlled robots to perform tasks, such as learning, decision-making and problem-solving that are normally associated with intelligent beings (Copeland, 2024). The chatbot model - ChatGPT was developed by OpenAI on November 30, 2022, and was considered an unprecedented technological revolution. ChatGPT (Generative Pre-Trained Transformer) uses "natural language processing to learn from Internet data, providing users with artificial intelligence-based written answers to questions or prompts" (UNESCO, 2023, p. 5). ChatGPT can be asked for data, analysis and even an opinion. However, the algorithm by which it works does not take a definite position as its interpretation is based on the statistical analysis of billions of texts on the Internet.

AI has gained popularity in a wide range of industries, including education. However, the use of technologies in education cannot be attributed solely to the development of various AI technologies. Nowadays, the higher educational institution students represent mainly Generation Z who have been using various technologies from a very young age and some of them have even developed some sort of addiction to them. As stated by Johnston et al (2024), they have different thinking patterns and ways of working

compared to their predecessors. According to Polakova and Klimova (2019), generation Z suffers from limited attention span and can not concentrate on the whole text. They are willing to read up to 20% of the text and get the gist as quickly as possible. In addition, Szymkowiak et al (2021) indicate that this generation lacks patience and opts for technologies that provide them with the ability to multitask. Therefore, ChatGPT which has appeared recently and offers them a chance to do their assignments and other tasks quickly, shortly gained popularity.

2.2. Benefits of ChatGPT for Students

ChatGPT can assist students of higher educational institutions in several key aspects of learning. Even though the AI use in education, in particular language education, is still in its infancy, a number of authors have already provided a comprehensive study of its employment for various purposes. After studying the scholarly literature, the following aspects have been highlighted by various scholars:

Initially, ChatGPT can be used to teach students how AI works, thus it can **develop digital literacy**. Additionally, students will have the opportunity to work critically on the obtained data. (Laupichler et al., 2022).

Furthermore, ChatGPT can offer quick and efficient assistance to students with questions about their courses, assignments, exams, or other academic matters (Cotton et al., 2023).

As stated by Cotton et al. (2023), chatGPT has the potential to **boost student engagement**, **collaboration and accessibility**, along with facilitating asynchronous communication and remote learning.

According to the article "The Impact of ChatGPT on Education: The Good and the Bad" published in Digital Learning Institute (2023), this tool provides **personalized learning and recommendations** that students obtain based on their learning history. It can also serve as a **24/7 virtual tutoring tool**, which offers students an immediate feedback and support upon their request. Students with tight deadlines can especially benefit from this.

The AI tool can also **boost students' confidence in writing** by offering them **grammar and spelling corrections** and **translations**. When it comes to writing, students can use it to **generate ideas** or look for suggestions on how to **improve their writing style** (Cotton et al., 2023) and generate suggestions for special formats (e.g., press releases, blog posts) from existing texts (Zhai, 2022).

ChatGPT can be of great assistance to students with disabilities. For example, students with impaired vision can use ChatGPT to read responses. Those students who have trouble typing can speak out their queries (Neendoor, 2023).

3. Methodology

Initially, a quantitative research methodology was applied to collect the empirical data for the present study, in particular, survey questionnaire. However, at the data analysis stage, qualitative research was also embedded as the study aims to provide not only the numerical data but also accentuate the hypothesized relations between different variables and patterns.

The survey consisted of 6 questions formulated in English, most of them being multiple choice, the options for which had been carefully determined based on the research needs. Alongside the multiple-choice, two open-ended questions were also included, mostly to collect additional details about the factors influencing students' decision to use ChatGPT.

The questions that were included in the survey for this study are the following:

- 1) Your gender?
 - a) Male b) Female c) Non-binary
- 2) Have you ever used ChatGPT?
 - a) Yes b) No c) Not applicable
- 3) Please provide at least one reason why you have used it.
- 4) For what kind of tasks do you usually use it for? Please, tick as many as applicable.
- a) Summarizing long essays and articles
- b) Generating ideas
- c) Using as a spelling and grammar checker
- d) Paraphrasing
- e) Analyzing articles and literary pieces
- f) Preparing presentations
- g) I never use it
- h) Other
- 5) If other, please specify.
- 6) When using ChatGPT, do you usually use it for
- a) Writing a part of the assignment
- b) Writing the whole assignment
- c) Not applicable

The survey questionnaire was prepared in Google Form to circulate among the target groups, which included undergraduate students (majors: English Philology, Georgian Philology, American Studies, Arabic Studies, Psychology, Philosophy, Chemistry, History, Visual Arts, Law, Economics) of Tbilisi State University who had enrolled in the state university based on the unified NAEC (National Assessment and Examination Centre) exam within the years 2020-2023. The respondents were told in advance that this was an anonymous survey in which their privacy would be preserved, so they were asked to provide honest answers.

The questionnaire was distributed among the groups of students online from January through February 2024. In total 74 student-participants provided their answers to the questions included in the survey.

4. Results and Discussion

The survey consisted of a total of 74 higher education (TSU) students in Georgia who completed the questionnaire, with the majority of the respondents (82.4%, n=61) being female and 17.6% (n=13) being male. The demographic profile of the students can be found in Figure 1.

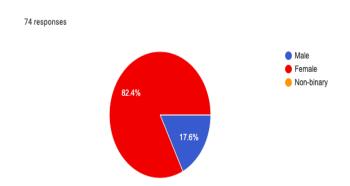


Figure 1: Respondents' Gender

After identifying the demographic profile of the respondents, the students were asked to reflect on whether they have ever used ChatGPT. The majority of the respondents (70.3%, n=52) provided a positive answer to the given question. 24.3% (n=18) have not used ChatGPT so far, and for a minor part (5.4%; n=4) the question was not applicable (Figure 2).

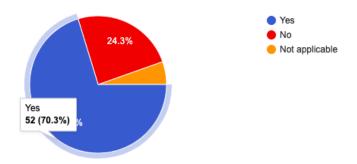


Figure 2. Having Used ChatGPT

The data analysis has revealed that most of the students have used ChatGPT irrespective of their gender. It is noteworthy that according to a recent study, 69.5% of AI users are men and only 30.5% are women (Koetsier, 2023). An equal number of males and females were not engaged in the survey; therefore, we cannot make any significant implication in this regard. However, this might suggest that the numbers and percentages could be slightly higher if the respondents represented the gender equally.

In addition, we tried to identify the underlying reason for students' addressing ChatGPT. The analysis of the survey findings obtained through the open-ended questions has revealed that the respondents use ChatGPT for the following reasons: to obtain information; to check information; just out of curiosity; to elicit explanation; to get ideas; to save time; and to summarize texts (Table 1).

Table 1. Why Students Use ChatGPT

To obtain	There wasn't enough information about the topic on the internet, so I had to use;
information	I could not find information about the topic, so I asked ChatGPT to provide me;
	I wanted additional information about my assignment;
	To gain more information;
	I've asked some general facts in which I was interested;
	I used it for gaining some information which I needed for some presentation at the
	university;
	To obtain new information;

	To find answers to my questions about aby theme; Provides information about everything;
To check information	Mainly to check my answers; I use it to correct my mistakes and also ask questions about some topics; For checking some unclear information; I am using it as a grammar and spelling checker.
Out of Curiosity	Because of curiosity; I was interested in how it worked; My friend would not stop telling me to try it; I was just curious;
To elicit an explanation	I didn't know how to solve my exercises and it helped me a lot; I could not understand the task so asked it to explain me; To learn from it as I can use it to teach me something step by step; To understand concepts of certain themes in more details; It explains information that I don't get in a understandable way and that helps me a lot; To analyze information interactively - make AI retype text in a simpler way or explain certain paragraphs further.
To get ideas	To help me formulate and come up with some ideas; To get ideas for presentations; Used it as an idea generator; Used it to provide me some ideas;
To save time	It can give you answer in a minute; To collect information fast; Because it's a quick way to find any kind of information; I was very limited in time and needed to complete the task as quickly as possible; Personally, it helps me do my presentations more quickly and use my time wisely; It allows you to get the exact information that you're looking for in matter of seconds, which in other cases without AI could might take you more than a several minutes; It's providing information faster than other websites; It is a fast way to make assignments; It's providing information faster than other websites; It gives answers very fast; Honestly it makes reading dozen amount of university assignments so much easier and faster; It helps us to understand content concisely and quickly;
To	To summarize a long text;

summarize	To shorten a text;
texts	I have used it when I needed summary for some text, or just needed creative ideas
	for presentation;
	To summarize long articles;

We also attempted to identify the most frequently claimed reason by students for using ChatGPT. The findings indicate that among the reasons why the students use ChatGPT the most common one was to save time (27.9%, n-12), followed by using ChatGPT to obtain information (20.9%; n=9); 14% (n=6) stated that they used ChatGPT to get explanation and the remaining reasons (to check information, out of curiosity, to get ideas, to summarize texts) were equally represented with 9.3% (n-4) each. It is noteworthy that for the majority of respondents, ChatGPT was used solely to save time and there was no mention of any progress in their skills; in other words, they just addressed the tool to put less time and effort into completing the assigned task which might be diverse and contain different levels of complexity.

What does this finding indicate? Presumably, this finding might reflect the general tendency of the participants to shortcut their learning experience, put in less effort, and thus get "the most out of the least." Of course, this tendency can be extremely attractive to a "global" student who has a busy agenda on the plate wishing to balance his work, study, personal life and entertainment. However, the **real question here is how productive and beneficial reducing time spent on assignments can be for the ultimate academic performance. The answer to this question should be elaborated further but one thing is clear. As research shows, not only pure cognitive abilities but also various non-ability factors, such as self-efficacy (Bandura & Schunk, 1981), creativity, self-control, resilience, learning engagement, etc. are the key factors leading to academic success. Against this background, if we combine the first two most cited reasons for addressing ChatGPT, students utilize the tool to get information as quickly as possible which might theoretically devoid them of the opportunity to engage with the task sufficiently thus preventing them from demonstrating some of the above-mentioned individual characteristics that could ultimately facilitate their academic performance.**

Furthermore, the survey identified the type of academic tasks students mainly used the AI tool (ChatGPT). The data revealed that the students mainly used ChatGPT to summarize long essays and articles (35.1%, n=26), 33.8% (n=25) used it for generating ideas, 27% (n=20) to check spelling and grammar, 13.5% (n=10) admitted using ChatGPT either for paraphrasing or analyzing articles and literary pieces, or preparing presentations, 16.2% (n=12) stated that they use ChatGPT for other types of tasks and eventually 23% (N=17) claim to never have used ChatGPT (figure 3).

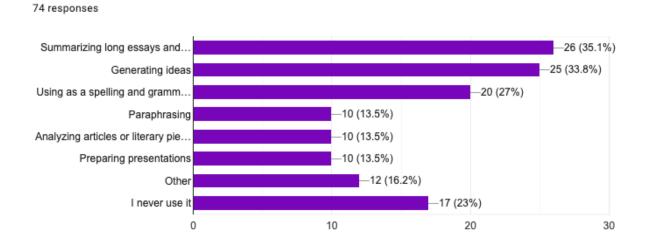


Figure 3. Type of tasks ChatGPT was used for

The data suggest that students mainly use ChatGPT to summarize long essays and articles, which, again, indicates that the students' primary goal is to shorten the time spent on the reading assignment. However, with the help of ChatGPT, they can also try to simplify the reading comprehension process, skip the conventional reading comprehension stages such as skimming and scanning and simply put less effort into working on the text. This supposition can especially become noteworthy when they deal with the articles and texts in their non-native languages. In most cases, it can even be the language they are majoring in, as, according to the survey participants' profiles, the majority of them (58,3%) are specializing in English Philology. To expand on this finding, we can argue that even though the AI tool can be a great relief to students who have busy schedules and might have a hard time managing their workload daily, this benefit can still be considered short-term and only limited to a familiar setting (for instance, the students may use it at home, outside the class, when they have an internet connection, etc) since, in the long run, the AI-assisted task fulfillment, similar to any other AI technology, can trigger their dependence and insecurity when functioning in an unfamiliar setting.

As previously mentioned, this can particularly affect EFL learners because as theory and practice show, success in learning a foreign language is achieved through the combination of many teaching-learning activities including investing sufficient time into the target language through practicing the 4 language skills (listening, reading, writing and speaking) adequately, learning to think in the target language exercising patience and developing linguistic intuition, meaning deduction strategies as well as self-correction techniques, etc., whereas uncontrolled and random use of ChatGPT might deprive the students of all these experiences.

The study has also revealed some unexpected reasons beyond using ChatGPT. Out of 74 students, 13 chose the "other" option from the multiple-choice question about the reasons for using the tool which they also had to specify. Table 2 below shows their responses.

Table 2: Other types of tasks

Table 2. Other types of tasks
For technical subjects;
Great help with managing my ongoing health issues. Ask random questions from my everyday life.
When I cannot find necessary information I ask GPT because some sites are not available for us or
we have to pay to unlock that site
Using as a social media content generator
For fun, like comedy staff
Try to break it by confusing ChatGPT

It is noteworthy that most of the "other" reasons the students highlighted are personal and not necessarily linked to their educational needs. In other words, the students have personalized and customized the tool very well, which shows that ChatGPT, if used reasonably, is a great contributor to promoting digital literacy in education.

The questionnaire also asked students to reflect on whether they used ChatGPT to do the whole assignment or only some part of it. The results obtained from the survey have revealed that the majority of the students (84.9%, n=62) use ChatGPT to write only a portion of an assignment. 6.8% (n=5) used this tool to produce the whole assignment and for 8.2% (n=6) the question was not applicable (figure 4).

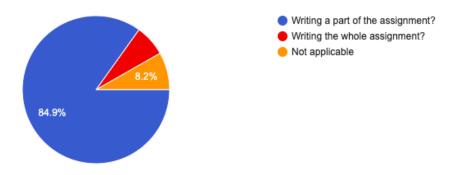


Figure 4

5. Limitation

Using a survey questionnaire as a data-collection instrument means that we collected the empirical data exclusively based on students' answers. Even though the survey was anonymous and they had been informed in advance about its anonymity, there was still a certain probability that students might not have been honest in their answers because of not feeling safe while answering. Besides, the responses were recorded from a relatively limited number of students, 74 in total, which might not depict the accurate landscape. Other than that, the questionnaire was created in English which might potentially be a language barrier for some students.

Despite the mentioned limitations, we do believe that our study provides valuable findings in determining general tendencies which would lead to a more systematic study in the future.

5. Conclusions and Recommendations

The primary objective of the research conducted among the undergraduate students of Tbilisi State University between January and February 2024 was to analyze and reflect on the practice of using AI, specifically ChatGPT in education by focusing on the underlying reasons reported by the students. The study revealed significant reasons and rationale beyond using this digital tool which can be a valuable source for expanding research in this direction.

As a result of the empirical data analysis, which included 74 student responses to the survey questionnaire, the following implications can be made:

- 1) The most reported reason for students' use of ChatGPT for differently leveled task fulfillment was mentioned to be the desire to save time and get information as shortly as possible. Therefore, it's recommended that more systematic research should be done to reveal what effect curtailing the time spent on the home assignments regularly can have on the student's academic performance in the long run.
- 2) Even though the AI tool can be beneficial to modern students in managing their heavy workloads daily, this benefit can only be considered short-term and limited to a familiar setting since, in the long run, AI-assisted task fulfillment can trigger their insecurity when functioning in an unfamiliar setting.
- 3) The use of ChatGPT by EFL learners and those students majoring in foreign languages is especially worth taking a further look at as uncontrolled and random use of ChatGPT might deprive the L2 learners of the teaching-learning strategies proven to be effective while mastering a foreign language.
- 4) The data also provided some implications that the reasonable use of AI in education can contribute to promoting digital literacy. Thus it is suggested that all stakeholders in education cooperate in identifying and designing productive AI-assisted assignments to integrate them into the educational curriculum.

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