

**Effectiveness and Risk Management Strategies on the Use of Chat GPT  
in the Field of Academic Education**

**Aqirino Rani Putri**

Universitas Muhammadiyah Surakarta  
E-mail: a210210020@student.ums.ac.id

**Tri Nur Wahyudi**

Universitas Muhammadiyah Surakarta  
E-mail: tnw122@ums.ac.id

Submitted: 11-11-2024

Accepted: 20-01-2025

Published: 06-02-2025

**Abstract**

In this era of technological development, Chat GPT comes as an innovation that offers various benefits and challenges in education. It opens new opportunities for more interactive and personalized learning but also tests our readiness to manage its ethical and academic impacts. This study aims to understand how students cope with risks and use Chat GPT effectively. his research used a mixed method with a sequential exploratory approach. The object of this research was Universitas Muhammadiyah Surakarta, while the subject was Accounting Education Study Program students. Data collection techniques included observation, interviews, documentation (qualitative), and questionnaires (quantitative). The number of informants was 5 students (qualitative), and there were 105 respondents (quantitative). The results of this study indicated that the use of Chat GPT was 73.3% for completing coursework, 55.2% for looking for references and literature, 37.1% for making summaries, and 23.8% for translating languages. The risks of using Chat GPT were 65.7% excessive dependence, 61.9% reducing critical thinking skills, 40% high plagiarism, and 32.4% inaccurate and difficult-to-understand information. For strategies used to overcome the risks of using Chat GPT, 28.6% of respondents used Chat GPT answers only as references, 27.6% paraphrased in their own language, 24.8% double-checked answers with other sources, and 19% limited the use of Chat GPT. So, Chat GPT Chat is very effective in helping students complete academic assignments.

**Keywords:** Effectiveness, chat GPT, academic, risk management

## INTRODUCTION

The development of science and technology brings significant changes. Along with the existing developments, science and technology will be more sophisticated by creating new technologies. Technological advances will affect human life, such as in completing tasks. Breakthroughs in the development of science and technology also make it easier for humans to reach information that has not been known before. With the current technological transformation, task completion will be completed more quickly without using a long time. The rapid development of science & technology is able to create new products such as applications and equipment that are practical to learn and implement in learning media (Fitri et al., 2019). Learning media is needed in supporting the learning process, because it can create a learning atmosphere that is not monotonous (Miasari et al., 2022). This reflects the Era of society 4.0 which leads education to involve technology. As a technological development in the form of human cooperation with technological systems such as the *Internet of Things* and *Artificial Intelligence* in helping to solve social problems that exist in the virtual and real world (Rouf, 2019). Subandowo (2022) suggests that in the era of society 5.0, the world of education plays an important role in improving the quality of human resources.

The development of this technology, for example *Artificial Intelligence* (artificial intelligence) or often referred to as AI is an application that is being discussed, especially in the world of lectures, *Artificial Intelligence* makes a good contribution to students in helping to complete academic assignments (Arly et al., 2023). This artificial intelligence (AI) product uses natural language processing (NLP) technology that allows interacting with users in everyday language. NLP technology enables AI to understand, process, and respond to user requests in a manner similar to human communication. This feature allows AI to provide information, answer questions, and complete tasks based on given commands, just like interacting with humans. One of the NLP technologies is ChatGPT (Generative Pre-trained Transformer). As one of the Chatbot, ChatGPT is a technology that can provide understanding similar to humans (Zein, 2023). ChatGPT was recognized by one million subscribers when it was launched in November 2022 within one week (Baido-Anu & Ansah, 2023). Chat GPT has become an attraction by students, the development of this chatbot provides a variety of benefits and challenges in the scope of education. Chat GPT is often used by students because its function is easy to use in increasing student productivity (Handoyo et al., 2023). In this digital era, Chat GPT greatly supports the learning process, where the learning process can be done anywhere and anytime (Faiz & Kurniawaty, 2023).

Several studies have been conducted to examine the impact of using AI in education. Mairisiska & Qadariah (2023) suggested that the majority of students gave a positive assessment of the ease of use of Chat GPT, the expansion of knowledge they gained, and the speed and accuracy of the answers generated by Chat GPT and also increased their involvement in the learning process. The use of Artificial Intelligence in university students has brought many problems such as plagiarism, reduced critical thinking, and skills related to student creativity and innovation (Lukman et al., 2024). Although many studies have been conducted that discuss the use of AI in education, the studies only focus on the technical aspects of using Chat GPT, such as answer quality and effectiveness without investigating how students understand the risks that may arise from using Chat GPT. Therefore, this study aims to fill the gap by providing an in-depth analysis of Accounting Education students' experiences with Chat GPT and how the strategies they apply to overcome these risks.

## METHOD

This research used mix methods by combining qualitative and quantitative research (Creswell, 2009). Qualitative data was obtained by interviewing 5 informants who used Chat GPT in the learning process. Interviews were conducted to dig deeper information about student opinions on the use of Chat GPT. The interview question guidelines include how students view the ease of accessing Chat GPT, increasing understanding of the answers given, satisfaction with the use of Chat GPT and the impact caused by Chat GPT. Quantitative data was collected through questionnaires distributed to students, respondents in this study were 105 student respondents who already understood Chat GPT. Indicators used to analyse the effectiveness of use, risks of use, strategies to overcome risks, student satisfaction in using Chat GPT.

This study involved 105 respondents in Accounting Education study program students at Universitas Muhammadiyah Surakarta, the selected students were semester 1, 3, 5 and 7. Data analysis techniques, qualitative data generated from in-depth interviews were then analyzed by classifying concepts arising from students' experiences of Chat GPT. While quantitative data was analyzed with descriptive statistics to show the effectiveness of use, risks of use, strategies to overcome risks, student satisfaction in using Chat GPT. The validity of the data used in this study was obtained through source triangulation, the step in source triangulation is the process of testing the validity of the data by transcribing the data by converting the recording into written notes that match the recording results without changing the results (Mahpur, 2017). The next stage is member checking, this stage aims to verify the data obtained by the researcher in accordance with what was revealed by the source.

## FINDINGS AND DISCUSSION

### *Findings*

In the era of advanced technology, the use of ChatGPT in the field of education, especially among students, is increasingly widespread. Chat GPT has become a tool that can be accessed at any time to help students complete various academic tasks. This study aims to reveal how Accounting Education students at Universitas Muhammadiyah Surakarta utilise ChatGPT effectively as well as the challenges and opportunities that arise from its use. Preliminary findings show that ChatGPT not only helps students in completing assignments, but also provides assistance that suits their needs. In addition, the use of Chat GPT creates a more interactive learning atmosphere and encourages university students to analyse information faster without spending too much time. However, it needs to be realised that the use of Chat GPT also requires clear academic boundaries to avoid violations of ethical use within the scope of lectures. This study reveals the perspectives of five Accounting Education students at Universitas Muhammadiyah Surakarta about their experiences in using ChatGPT. The following table presents the answers of each informant based on the themes that have been identified.

Table 1. Interview Results

Informant	Interview Results
Informant 1	Students revealed that they learnt about Chat GPT through friends' recommendations. The platform aims to help in various aspects such as searching for

---

	information, completing assignments and understanding difficult material.
Informant 2	In completing academic tasks, students use Chat GPT as a tool such as to answer questions, paraphrase and search for journal literature. However, the answers provided need to be further researched to be more accurate.
Informant 3	Although Chat GPT can be accessed at any time and is very helpful for students in completing academic assignments, it should be noted that the answers provided sometimes lack depth and relevance.
Informant 4	It is recommended that the answers by Chat GPT be converted into their own language and include the original source. This is done to reduce the risk of plagiarism and improve students' ability to analyse information independently.
Informant 5	GPT Chat is a platform that supports the learning process by providing easy access to information and helping to complete various academic tasks. To be more effective and efficient, you should only use Chat GPT answers as reference. In addition, it is important to limit the use of Chat GPT to avoid dependency.

---

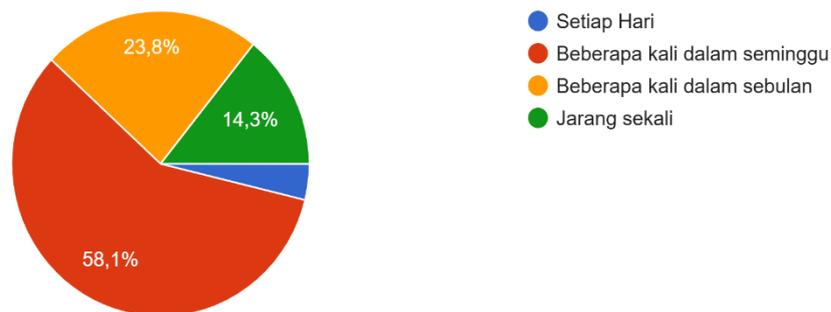
### **Understanding of Chat GPT by Students**

The results of the research that has been conducted based on interviews with five resource persons who are students of the Accounting Education Study Programme at Universitas Muhammadiyah Surakarta. The experience of most students has used AI Chat GPT in the learning process, students use Artificial Intelligence is considered very helpful in completing coursework. Chat GPT is interpreted by students as a platform that can provide instant answers to what is asked by getting answer results quickly, because the language in this AI is similar to human language. The features provided by this AI are also very accommodating such as to translate languages, create article outlines and search for journal article references.

### **Experience of Using GPT Chat by Students**

Based on the results of interviews conducted, some students use Chat GPT in completing their academic assignments, the use of Chat GPT is very easy to at least provide a basic overview of an answer which can then be further examined with other

references. Students choose this Chat GPT because accessing the use and features provided is very easy and also free. The results of the answers given by Chat GPT and the language given are also easy to understand, but sometimes the answers and language are too broad to be difficult to understand. The results of the answers are not directly copied and pasted, namely changed with their own language or paraphrased so that it is easy to understand further. This AI is used by students when experiencing difficulties, the rest are looking for references on Google directly because there are more references. The use of Chat GPT in the question-and-answer feature often causes errors because with different smartphones but the same question will produce different and inappropriate answers.

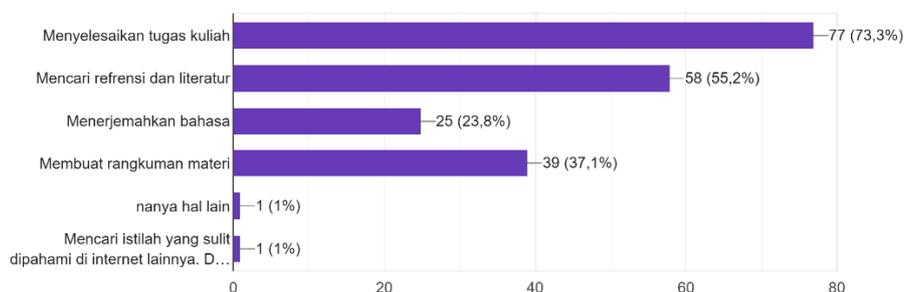


**Diagram 1. Frequency of Use of GPT Chat**

The quantitative results in Diagram 1 show that most students use Chat GPT several times a week (58.1%), on the other hand (23.8%) several times a month, (14.3%) rarely use Chat GPT. In addition, as many as who use Chat GPT every day there are only 4% of students.

### Implementation of GPT Chat Usage by Students

The results obtained from the answers of most students regarding the application of Chat GPT are only used to complete coursework, choosing Chat GPT because it is very easy to use and can be accessed anytime and anywhere. In its application, students have never used this AI to discuss with lecturers, but lecturers give permission to use this AI only to find references for material that has not been understood and then can search further in journals or appropriate sources.



**Diagram 2. Implementation of GPT Chat Usage**

While from the quantitative results in Diagram 2, several activities carried out by students in using Chat GPT were produced, namely 73.3% to complete coursework,

55.2% of respondents used Chat GPT to find references and literature, 37.1% of respondents used Chat GPT to summarise material and 23.8% of respondents used it to translate languages.

### Risk of Chat GPT Use by College Students

Some students admit that the use of Chat GPT in the learning process has positive and negative impacts, the positive impact caused by Chat GPT is that it really helps students in completing their academic assignments and saves time in doing assignments, meaning that students do not need to take time to complete it. While the negative impact found by some students is a decrease in the level of critical thinking to complete tasks because they only rely on Chat GPT and high plagiarism because they directly copy and paste the answers given by Chat GPT without changing their own language.

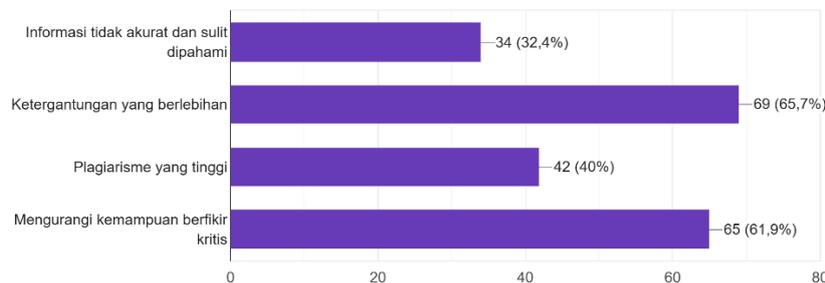


Diagram 3. Risk of Chat GPT Use

Meanwhile, from the quantitative results in Diagram 3, the results show that the majority of students admit to getting risks from using Chat GPT, namely 65.7% Chat GPT tends to have the risk of excessive dependence, 61.9% reduce critical thinking skills, 32.4% of the information provided by Chat GPT is inaccurate and difficult to understand. Furthermore, 40% of respondents admitted that the use of Chat GPT caused high plagiarism.

### Strategies to Overcome the Risk of Using Chat GPT by Students

The results obtained by most students are strategies to overcome the risks of using Chat GPT by changing the answers generated by this AI by changing them in their own language or by looking for answers in other sources so that the answers are more precise and appropriate. Some students also limit the use of Chat GPT to avoid dependence, students also try to find answers in journals or certain sources first before using Chat GPT as a tool to complete assignments.



Diagram 4. Strategies to Overcome the Risk of Using Chat GPT

Meanwhile, from the quantitative results in Diagram 4, it was found that 28.6% of the majority of respondents used Chat GPT only as a reference, 27.6% of respondents paraphrased answers from Chat GPT in their own language, 24.8% of respondents double-checked answers on other sources. However, there were also 19% of respondents who admitted to limiting the use of Chat GPT.

## ***Discussion***

### **Understanding of ChatGPT by Students**

Artificial Intelligence is an inseparable part of the academic environment. With AI, every student can fulfil their needs in a more effective learning process. Because, in the learning process by utilising AI, it will create a memorable atmosphere so that it can make them have the confidence to complete the learning process independently (Ramadiani et al., 2023). Based on the results of the study, it shows that most students suggest that AI technology is very influential in the academic sphere as a support for the learning process. In line with research Mustika et al. (2024) which suggests that AI can support students in the learning process. One of the AI that is often used by students is Chat GPT, Chat GPT is an artificial intelligence in the form of a human-like conversation that can provide answers instantly and quickly from what is asked. The same as stated by Serdianus & Saputra (2023) that the text results provided by Chat GPT are like human language. Easy and free access, making it easier for students to use the AI, because it can also be accessed anytime and anywhere using a smartphone without the need to use a long time (Hasim et al., 2023).

The features provided by Chat GPT such as the question column, this also makes it easier for students to interact with Chat GPT who directly fill in the question column with what is needed. Chat GPT also helps in the writing improvement process, such as correcting grammar or editing sentences to make them better. Although it can provide good benefits, the use of Chat GPT also needs to be followed up to produce good understanding because Chat GPT also has the potential to produce answers that are not always accurate and irrelevant. However, in using Chat GPT, students also need to understand the risks that arise from not relying on the answers provided by Chat GPT without enriching their understanding by referring to other sources of reference.

### **Experience of Chat GPT Use by Students**

The use of ChatGPT among Accounting Education students at Universitas The use of ChatGPT among Accounting Education students at Universitas Muhammadiyah Surakarta shows that some students use this tool to support the learning process. ChatGPT allows students to receive relevant information and support when completing academic tasks, such as answering questions, finding journal references and paraphrasing. Although not all students utilise the full potential of ChatGPT, the use of this tool is increasing and shows great potential in supporting the learning process. ChatGPT can provide relevant and concise answers, thus increasing the effectiveness of learning. Research conducted by Luthfiyyah et al. (2024) supports this finding that ChatGPT is considered effective due to its ease of access, ability to understand the context of the question, and the speed and accuracy of the answers provided.

The ease of access and its ability to understand the context of the question makes Chat GPT the main choice of students. This is also supported by research Rizki et al. (2024) which shows that students increasingly rely on ChatGPT as an efficient and effective reference source. The high level of ChatGPT usage is due to the easy and instant user experience in accessing information. Students who frequently use ChatGPT tend to benefit from the speed and accuracy of the answers provided, making them more confident and comfortable using this tool in the learning process. However, this contradicts the findings Zulfikasari et al. (2024) who revealed that the use of ChatGPT still has some obstacles, such as limitations in understanding complex contexts and the potential to produce inaccurate information.

ChatGPT's ability to provide information quickly and responsively makes users feel supported in finding solutions to their academic problems. With quick access to a wealth of information, students can easily get answers to questions about course materials, assignments, and research projects. This not only speeds up the learning process, but also helps students overcome any difficulties. When users feel supported by technology, they will be more motivated to learn and delve deeper into the material. Therefore, ChatGPT plays an important role in enhancing their learning experience and supporting their academic performance. This positive experience encourages them to continue using ChatGPT as an effective learning resource, improving their learning quality. Low usage in students using ChatGPT a few times a month 24% or rarely 14%. The low use of AI, especially ChatGPT, is caused by several factors. One of them is the lack of student understanding of the functions and uses of ChatGPT in the learning process. In addition, limited access to this technology and inappropriate learning methods to incorporate AI into teaching and learning activities are barriers that contribute to the low adoption of AI by students. This reduces the possibility of improving learning effectiveness.

This study makes a significant contribution in revealing the understanding of ChatGPT usage patterns among Accounting Education students at Universitas Muhammadiyah Surakarta. By combining empirical findings and relevant literature review, this study succeeded in enriching students' understanding of the role of ChatGPT as an effective learning tool. The results of this study are not only relevant to the current condition of higher education, but also pave the way for more innovative and technology-based curriculum development. Firstly, this study is still limited to the context of Accounting Education students at Universitas Muhammadiyah Surakarta, so the results may not be generalised to a wider context. Secondly, this research approach focuses more on students' views without in-depth analysis of how ChatGPT affects learning outcomes. Lastly, this study has not explicitly addressed ethical issues and risks related to the use of ChatGPT, such as the potential for plagiarism and over-dependence.

### **Implementation of GPT Chat Usage by Students**

Among students, the use of Chat GPT shows a variety of models, with the main focus on completing academic assignments and finding references and literature. Based on the data in the diagram above, the majority of students (73.3%) use Chat GPT as a tool in doing assignments. This high percentage reflects the need for students to complete assignments quickly and accurately, it also shows the role of ChatGPT as an effective resource to support student learning productivity. By using this technology, students can access relevant information and receive assistance in understanding the subject matter. As a learning aid, ChatGPT not only improves the efficiency of task completion, but also

helps students gain a deeper understanding of the subject matter. Therefore, the use of ChatGPT can make a positive contribution to students' academic success. In line with the research results Suryono et al. (2023) that the majority of students agree that the use of Chat GPT during the learning process has a positive impact on their productivity. The use of Chat GPT to find references and literature (55.2%) this number shows that the majority of students use Chat GPT as an alternative tool that has the ability to provide summaries and explanations of concepts and basic understanding of various topics. In this context, GPT Chat serves as a tool that provides guidance when searching for scientific journals, especially in the early stages of research. GPT Chat can provide useful recommendations such as related keywords and appropriate academic databases, but users need to conduct further searches and refer to the original sources. While GPT Chat recommendations are intended to provide initial guidance and facilitate a more efficient literature search process, they cannot replace the importance of verifying information with academically recognised references. While GPT Chat is useful for initial support, final decisions regarding the accuracy and relevance of information should be confirmed by reading and citing the original academic journal or paper.

ChatGPT has language translation capabilities, which is used by 23.8% of students. Most students use ChatGPT as a self-study tool to improve their grammar knowledge and understanding. Using ChatGPT as a learning resource not only helps in understanding grammar, but also increases their confidence in communicating. Thus, ChatGPT plays an important role in supporting students' language learning process. This is in line with the research results Abimanto & Mahendro (2023) that listening, speaking, reading and writing skills improved significantly after using AI and supports the effectiveness of using AI in language learning. Around (37%) of students also use ChatGPT as a tool to summarise material, ChatGPT allows them to summarise information from various sources more quickly and efficiently. This makes it easier to understand the essence of what they are learning without having to read the whole text in detail. ChatGPT helps in filtering out relevant information so that the resulting summary is more focused and structured. Using ChatGPT for this purpose increases learning efficiency and helps them remember the key points of the class material. In line with what was stated by Yani (2024) that resumes generated by AI are very pertinent in a short period of time, but should be further explored for more in-depth and accurate information.

### **Risk of Chat GPT Use by College Students**

Based on a survey of 105 Accounting Education students at Universitas Muhammadiyah Surakarta, it was found that the use of Chat GPT poses significant risks. The biggest risk is excessive dependence (66%) occupying the highest percentage. This dependence can inhibit student independence in the learning process and affect thinking patterns. These results indicate the need for efforts to help them utilise technology efficiently, this is in line with the findings of Ifani et al. (2024) on Chat GPT can affect the quality of their learning due to dependency. The survey results (62%) of students' critical thinking skills also decreased after using Chat GPT, because with the help of this AI students do not need to think about deep answers for a long time. So, they will tend to depend on the results given by Chat GPT without changing or understanding further on other sources. This situation hinders the improvement of their deep critical thinking skills in the learning process, so an appropriate strategy is needed to help them maintain the habit of critical thinking. In accordance with the findings presented by Maulana et al. (2024) although the use of AI does not have an overall impact on students' critical

thinking, there are several other aspects such as the provision of originality of assignments without direct copying.

High plagiarism (40%) of students stated that the use of Chat GPT caused high plagiarism, this is because they tend to directly copy information directly from the answers given without changing or developing further. The method they use when directly copying the information without understanding it in depth, they will lose in reviewing broader and accurate information that suits their needs. Prastika et al. (2024) argued that Chat GPT is just used as a tool in answering the necessary questions, but students must have their own thoughts. Therefore, it is important for students to be aware of the risks of plagiarism that may arise from using this technology and develop better study habits so that they can continue to make genuine contributions to their academic work.

Some students (32.4%) stated that the information provided by Chat GPT was considered inaccurate and difficult to understand, causing them to doubt the accuracy and authenticity of the information from Chat GPT. The answers provided were also not necessarily able to fulfil their understanding in accordance with their needs. However, it is inversely proportional to Azizah & Mansyur (2022) that Chat GPT can produce understandable and more accurate explanations. Thus, many students ultimately prefer to double-check answers and look for additional references that they think are more reliable and easier to understand. In line with the opinion of Sufendi & Kamal (2023) that the results of the answers from Chat GPT still need to be studied further, because there is no certainty about the truth of the answers. For this reason, academic boundaries are needed in the use of Chat GPT so that students can submit results that are in accordance with writing guidelines. This situation emphasizes the importance of critical thinking skills when reviewing information from various digital sources.

### **Strategies to Overcome the Risk of Using Chat GPT by Students**

Excessive use of Chat GPT will lead to risks and changes in learning styles that are not good, so there needs to be a policy from each educational institution for students to limit the use of Chat GPT technology. The survey results show that among Accounting Education students at Universitas Muhammadiyah Surakarta, using strategies to overcome the risks arising from the use of Chat GPT. One of the main steps is that Chat GPT answers are only used as references (28.6%), the answers provided by Chat GPT are sometimes not necessarily accurate and in-depth. Thus, Chat GPT is used when students feel deficient in understanding and searching for an answer and then use Chat GPT as a reference to produce the answer needed. Although Chat GPT can provide appropriate answer references, students still need to think critically in processing the answers obtained, so as not to accept the answers by Chat GPT without the need to check further. This is in line with Sholihatin et al. (2023) who stated that Chat GPT is only a supporting tool in the learning process. Based on the analysis (27.6%) students in using this AI technology changed the answers obtained by paraphrasing using their own language. However, this does not mean that the answers given by Chat GPT are not appropriate. Because, by directly copying and pasting the answers generated without changing with your own language will affect the high risk of plagiarism. This can affect the originality of the assignments made by students and violate academic ethics.

A total of (24.8%) students double-checked the answers on other sources, this happens when this AI technology provides faster and easier answers, they only depend on the answers given without understanding more deeply and broadly. As a result, the results of

the answers given without further tracing with references to books or scientific articles will affect their ability to train students' critical thinking to complete tasks. By further processing the answers produced by AI and comparing with various scientific literature, students will have a deeper understanding and develop their critical thinking skills. This is in line with research Maula et al. (2023) who stated the need to supplement the answers produced by Chat GPT with other source references.

In the completion of tasks by students with the help of AI, there can be positive impacts and negative impacts. On the one hand, Chat GPT can produce answers faster without using a long time. However, on the other hand, excessive dependence on using Chat GPT can affect student thinking in completing assignments without the need to process more deeply by adding other sources of reference. The results show that some students stated that they limit the use of Chat GPT (19%), this could be because students are worried about the quality of assignments made with the help of AI because it will affect the future. Limiting the use of Chat GPT will also help develop students' thinking skills in completing original assignments. Thus, limiting the use of Chat GPT in academics also provides an opportunity for students to maintain critical and innovative thinking skills and be more confident in completing lecture assignments.

## CONCLUSION

The form of Artificial Intelligence technology that is often used by students is Chat GPT, Chat GPT is an artificial intelligence in the form of human-like conversations that can provide answers instantly and quickly. The results showed that the use of Chat GPT is very effective in the academic field and the risk of using Chat GPT by some students is that it can make a sense of excessive dependence and reduce critical thinking skills. The strategy taken to overcome this risk is to change the answers from Chat GPT or paraphrase in their own language and use Chat GPT as a reference. Based on the research conducted, it is hoped that further research will be able to explore how the limits of using Chat GPT in Higher Education.

## REFERENCES

- Abimanto, D., & Mahendro, I. (2023). Efektivitas Penggunaan Teknologi AI Dalam Pembelajaran Bahasa Inggris. *Sinar Dunia: Jurnal Riset Sosial Humaniora Dan Ilmu Pendidikan*, 2(2), 256–266. <https://doi.org/10.58192/sidu.v2i2.844>
- Arly, A., Dwi, N., & Andini, R. (2023). Implementasi Penggunaan Artificial Intelligence Dalam Proses Pembelajaran Mahasiswa Ilmu Komunikasi di Kelas A. *Prosiding Seminar Nasional*, 362–374.
- Azizah, M. A., & Mansyur, J. (2022). Perbandingan Kapabilitas Respons Chat GPT dan Gemini terhadap Pertanyaan Konseptual tentang Optik. *Jurnal Pendidikan Fisika Tadulako Online*, 10(December), 10–15. <https://doi.org/10.22487/jpft.v12i1.3510>
- Baido-Anu & Ansah, L. O. (2023). Education in the Era of Generative Artificial Intelligence (AI): Understanding the Potential Benefits of ChatGPT in Promoting Teaching and Learning. *Journal of AI*, 7(1), 52–62. <https://doi.org/10.61969/jai.1337500>
- Creswell, J. W. (2009). Qualitative, Quantitative, and Mixed-Methods Research. *Microbe Magazine*, 4(11), 485–485. <https://doi.org/10.1128/microbe.4.485.1>
- Faiz, A., & Kurniawaty, I. (2023). Tantangan Penggunaan ChatGPT dalam Pendidikan Ditinjau dari Sudut Pandang Moral. *Edukatif: Jurnal Ilmu Pendidikan*, 5(1), 456–463. <https://doi.org/10.31004/edukatif.v5i1.4779>

- Fitri, A., Neherta, M., & Sasmita, H. (2019). Faktor – Faktor Yang Memengaruhi Masalah Mental Emosional Remaja Di Sekolah Menengah Kejuruan (Smk) Swasta Se Kota Padang Panjang Tahun 2018. *Jurnal Keperawatan Abdurrah*, 2(2), 68–72. <https://doi.org/10.36341/jka.v2i2.626>
- Handoyo, E. R., Sugiarto, J., Lolo, A., & Chai, K. (2023). Identifikasi Pengaruh Penggunaan ChatGPT terhadap Kemampuan Berfikir Mahasiswa di Universitas Atma Jaya Yogyakarta Prodi Sistem Informasi Angkatan 2021. *KONSTELASI: Konvergensi Teknologi dan Sistem Informasi*, 3(2), 342–352. <https://doi.org/10.24002/konstelasi.v3i2.7241>
- Hasim, S., Khaira, M., Karunia, G. C. M. K., Limbong, J. A., & Amelia, D. (2023). Pengaruh Penggunaan Chat GPT terhadap Minat Baca Mahasiswa. *Edutech: Jurnal Teknologi Pendidikan*, 22(3), 2023. <https://doi.org/10.17509/e.v22i3.62944>
- Ifani, A., Agunawan, A., Abdullah, M. A., Vega, N., Rahmadani, R., Ilahi SS, W., & Azkar, A. (2024). Analisis Ketergantungan Penggunaan Chat GPT di Kalangan Mahasiswa Menyebabkan Penurunan Kualitas Belajar. *SMARTLOCK : Jurnal Sains dan Teknologi*, 3(1), 6–10. <https://doi.org/10.37476/smartlock.v3i1.4863>
- Lukman, L., Riska Agustina, & Rihadatul Aisy. (2024). Problematika Penggunaan Artificial Intelligence (AI) untuk Pembelajaran di Kalangan Mahasiswa STIT Pematang. *Madaniyah*, 13(2), 242–255. <https://doi.org/10.58410/madaniyah.v13i2.826>
- Luthfiyyah, K., Zhafira, L., Nurani, S., & Giwangsa, S. F. (2024). Analisis Peran Artificial Intelligence (AI): ChatGPT dalam Perkuliahan di Kalangan Mahasiswa PGSD Universitas Pendidikan Indonesia. *Jurnal Pendidikan Tambusai*, 8(1), 5282–5290. <https://doi.org/10.31004/jptam.v8i1.13221>
- Mahpur, M. (2017). Memantapkan Analisis Data Kualitatif Melalui Tahapan Koding. *Repository Universitas Islam Negeri Malang*, 1–17. <http://repository.uin-malang.ac.id/800/2/koding.pdf>
- Mairisiska, T., & Qadariah, N. (2023). Persepsi Mahasiswa FTIK IAIN Kerinci terhadap Penggunaan ChatGPT untuk Mendukung Pembelajaran di Era Digital. *Jurnal Teknologi Pembelajaran Indonesia*, 13, 1–10. [https://doi.org/10.23887/jurnal\\_tp.v13i2.2653](https://doi.org/10.23887/jurnal_tp.v13i2.2653)
- Maula, S. R., Aprillian, S. D., Rachman, A. W., & Azman, M. N. M. (2023). Ketergantungan Mahasiswa Universitas Jember terhadap Artificial Intelligence (AI). *ALADALAH: Jurnal Politik, Sosial, Hukum Dan Humaniora*, 2(1), 01–14. <https://doi.org/10.59246/aladalah.v2i1.608>
- Maulana, A., Azzahra, S., Kusuma, A. D., Al faidz, M. H., & Fadhila, A. I. (2024). Pengaruh Penggunaan Artificial Intelligence Dalam Pengerjaan Tugas Kuliah terhadap Berpikir Kritis Mahasiswa PAI UNJ. *SYNERGY: Jurnal Ilmiah Multidisiplin*, 1(4), 283–292. <https://e-journal.naurendigiton.com/index.php/sjim/article/view/1162>
- Miasari, R. S., Indar, C., Pratiwi, P., Purwoto, P., Salsabila, U. H., Amalia, U., & Romli, S. (2022). Teknologi Pendidikan Sebagai Jembatan Reformasi Pembelajaran Di Indonesia Lebih Maju. *Jurnal Manajemen Pendidikan Al Hadi*, 2(1), 53. <https://doi.org/10.31602/jmpd.v2i1.6390>

- Mustika, A. Y., Amalia, M. R., Aulia, M. H., Putri, N. M., Alam, N. G., Amri, S. A., Syifani, S. S., Azzahra, S. P., & Aisyah, U. K. (2024). Penggunaan Artificial Intelligence (AI) dalam Proses Kegiatan Belajar di Mata Kuliah IPA Dasar Mahasiswa Pendidikan IPA Universitas Negeri Semarang. *Jurnal Analis*, 3(1), 112–122. <https://jurnalilmiah.org/journal/index.php/analisis/article/view/703>
- Prastika, N. D., Anjarwati, D., Awaliah, M. A. S., Hartandi, D., Rahmadani, A., & Erika, F. (2024). Kajian Literatur Pemanfaatan Teknologi Artificial Intelligence untuk Meningkatkan Keterampilan Abad 21 Siswa dalam Pembelajaran Kimia. *Jambura Journal of Educational Chemistry*, 6(1), 47–60. <https://doi.org/10.37905/jjec.v6i1.23644>
- Ramadiani, Y., Agusmelda, R., & Betania, S. (2023). Peran Teknologi AI Terhadap Kreatifitas Mahasiswa dalam Menyelesaikan Tugas Akhir. *Jurnal Ortopedagogia*, 9(2), 126. <https://doi.org/10.17977/um031v9i22023p126-130>
- Rizki, O. F., Fernandes, R., & Kartika, R. (2024). Pengetahuan dan Pemanfaatan Chat GPT di Kalangan Mahasiswa ( Studi Kasus : Mahasiswa Departemen Sosiologi Universitas Negeri Padang ). *Naradidik: Journal of Education&Pedagogy*, 3, 222–228.
- Rouf, A. (2019). Reaktualisasi dan Kontekstualisasi Kearifan Lokal denganManhaj Global: Upaya menjawab problematika dan tantanganpendidikan di era Society 5.0 dan Revolusi Industri 4.0. *Seminar Nasional Pascasarjana*, 2(1), 910–914.
- Serdianus & Saputra, T. (2023). Peran Artificial Intelligence ChatGPT dalam Perencanaan Pembelajaran di. *Jurnal Ilmu Sosial Dan Pendidikan*, 3(1), 1–18. <https://orcid.org/0000-0003-4504-1781>
- Sholihatini, E., Diani, A., Saka, P., Rizky Andhika, D., Pranawa, A., Ardana, S., Yusaga, C. I., Fajar, R. I., & Virgano, B. A. (2023). Pemanfaatan Teknologi Chat GPT dalam Pembelajaran Bahasa Indonesia di Era Digital pada Mahasiswa Universitas Pembangunan Nasional Veteran Jawa Timur. *JURNAL TUAH Pendidikan Dan Pengajaran Bahasa*, 5(1), 1–10. <https://jtuah.ejournal.unri.ac.id/index.php/JTUAH/>
- Subandowo, M. (2022). Teknologi Pendidikan di Era Society 5.0. *Jurnal Sagacious*, 9(1), 24–35. <https://rumahjurnal.net/sagacious/article/view/1139>
- Sufendi, S., & Kamal, R. (2023). Pentingnya Etika Pemanfaatan Chat GPT pada Penyusunan Karya Tulis Mahasiswa. *Edukatif : Jurnal Ilmu Pendidikan*, 5(6), 2728–2734. <https://doi.org/10.31004/edukatif.v5i6.6013>
- Suryono, M. N. R. N., Bhagaskara, R. E., Pratama, M. A., & Pratama, A. (2023). Analisis Pengaruh ChatGPT Terhadap Produktivitas Mahasiswa. *Prosiding Seminar Nasional Teknologi Dan Sistem Informasi*, 3(1), 364–373. <https://doi.org/10.33005/sitasi.v3i1.511>
- Yani, A. (2024). Peran artificial intelligence sebagai salah satu faktor dalam menentukan kualitas mahasiswa di era society 5.0. *Journal of Education Research*, 5(2), 1089–1096.
- Zein, A. (2023). Dampak Penggunaan ChatGPT pada Dunia Pendidikan. *JITU: Jurnal Informatika Utama*, 1(2), 19–24. <https://doi.org/10.55903/jitu.v1i2.151>
- Zulfikasari, S., Sulistio, B., & Aprilianasari, W. (2024). Utilization of Chat GPT Artificial Intelligence (AI) in Student’s Learning Experience Gen-Z Class. *Lectura : Jurnal Pendidikan*, 15(1), 259–272. <https://doi.org/10.31849/lectura.v15i1.18840>