

# Benefits And Challenges of The Use of Generative AI in English Learning in Higher Education: Students' Voices

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#### Abstract

This research aims to examine how students perceive generative AI technology, such as ChatGPT, in the context of English language learning. The focus of this research is on how familiar students are with this technology, how open they are to using it, as well as the benefits and challenges that may arise, including the proper usage concerning English language learning. In an online survey involving 293 students from various majors at 3 universities in Bengkulu, Indonesia, it was found that the majority of students had a positive view towards the use of GenAI in English language learning. They realize that this technology can help them in personalized learning, providing assistance in writing, completing assignments, and also in research and analysis. However, despite the many advantages, students also expressed some concerns. They are concerned about the accuracy of the information generated and ethical issues. By understanding these student perspectives, educators and policymakers can better tailor the use of GenAI to meet their needs and concerns, as well as promote better English learning outcomes.

Keywords: Benefits, Challenges, English Learning, Generative AI



#### Introduction

Technology today is not only used for daily communication but has also expanded its functions for educational purposes. Gadget technology, in particular, has become an accepted norm within the educational community. In addressing the demands of mastering 4C skills (communication, collaboration, critical thinking, and creativity), interactive technology must be maximally integrated to enhance students' language skills, particularly for English as a Foreign Language. (English as a Foreign Language). Furthermore, technology not only disseminates information but also provides tools for active learning, motivation, and student engagement. (Mahmoud, 2022). Its integration can be implemented at all stages of learning, from elementary school to higher education. (Papadakis & Kalogiannakis, 2019). Various researchers focusing on mobile technology, Pham et al. (2018), Lei et al. (2022), and Aliakbari and Mardani (2022), have confirmed that Mobile-Based Applications can enrich EFL learners' motivation for accurate language use, for example, by spending their leisure time learning more vocabulary, participating in class activities, conversing with native English speakers, and providing opportunities to continuously access materials and resources available for free or for a fee on the internet.

Furthermore, technologies such as smartphones, social media, and Generative Artificial Intelligence (Gen-AI) have rapidly advanced. Generative AI is a type of artificial intelligence technology that can create various types of content, ranging from text, images, to audio, based on what it has learned from existing content. In other words, Generative AI allows users to 'create new content.' (Chan and Hu, 2023). Some examples of GenAI tools include ChatGPT, Bard, Stable Diffusion, and Dall-E. Their ability to handle complex requests and produce human-like outputs has driven research and interest in the integration of GenAI across various fields such as healthcare, medicine, education, media, and tourism.

ChatGPT, for example, has caused a surge of interest in the use of GenAI in higher education since its release in November 2022. (Hu, 2023). This is a conversational AI system developed by OpenAI. With a large autoregressive language model (over 175 billion parameters) trained on a vast corpus of text data, ChatGPT can generate human-like responses to various text-based inputs. This model has been trained on a variety of texts, including books, articles, and websites, enabling it to understand user inputs, generate responses, and maintain



coherent conversations on various topics. There has been extensive prior research discussing its potential in transforming disciplinary practices such as medical writing (Biswas, 2023; Kitamura, 2023), surgical practices (Bhattacharya et al., 2023), and healthcare communication (Eggmann et al., 2023), as well as enhancing teaching and learning in higher education. (Adiguzel et al., 2023; Baidoo-Anu & Ansah, 2023).

One of the main uses of GenAI in higher education is to enhance students' learning experiences through its ability to respond to user requests and generate highly original outputs. Text-to-text AI generators can provide writing assistance to students, especially non-native English speakers (Chan & Lee, 2023), by allowing them to brainstorm ideas and receive feedback on their writing through applications like ChatGPT. (Atlas, 2023). Whereas AI text-to-image generators like DALL-E and Stable Diffusion can serve as valuable tools for teaching technical and artistic concepts in art and design. (Dehouche & Dehouche, 2023). GenAI tools are also believed to be useful research aids for generating ideas, synthesizing information, and summarizing large amounts of text data to help researchers analyze data and compose their writings (Berg, 2023; Chan & Zhou, 2023), thereby contributing to efficiency in research and publication.

On the other hand, there are challenges regarding the limitations of GenAI and issues related to ethics, plagiarism, and academic integrity. Kumar's (2023) analysis of AI-generated responses to academic writing prompts shows that the text output, although mostly original and relevant to the topic, contains inaccurate references and lacks a personal perspective that AI generally cannot produce. For foreign language learners, crafting the right prompts poses its own challenges as it requires a certain level of linguistic skill; and excessive reliance on GenAI tools can hinder students from developing writing competence. (Warschauer et al., 2023). Additionally, GenAI is unable to assess the validity of content and determine whether the generated output contains false information or misinformation, thus its use requires human supervision. (Lubowitz, 2023).

Furthermore, because the output generated by AI cannot be detected by most plagiarism checkers, it is difficult to determine whether a piece of writing is the original work of the author. (Peres et al., 2023). As Zhai (2022) warned, the use of text-to-text generators like ChatGPT can jeopardize the validity of assessment practices, particularly those involving written

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assignments. Therefore, the widespread use of GenAI can pose a serious threat to academic integrity in higher education. The benefits of GenAI underscore the potential of technology as a valuable learning tool for students, while its limitations and challenges highlight the need for research on how GenAI can be effectively integrated into the teaching and learning process.

In a learning environment, the way students perceive technological innovations like GenAI, their views, attention, and experiences with the technology can impact their willingness to use the tool and, consequently, the extent to which the tool is integrated into learning. Therefore, the focus of this research is: 1) To what extent are students familiar with GenAI technology such as ChatGPT?; and 2) What are the potential benefits and challenges associated with the use of GenAI in the English learning process as perceived by students?

#### **Research Method**

#### **Research Design**

Explanatory sequential mixed methods design, the kind used in this study, tries to provide pertinent information required to grasp the research topic more effectively (Pardede, 2018). The study started with quantitative data collection and then moved on to qualitative data collection to further explain or elaborate on the quantitative results that had already been acquired.

# **Data Source**

The data source in this study is the information obtained from questionnaires distributed to respondents, namely students from 3 universities in Bengkulu City, Indonesia, who have taken or are currently taking English courses. The convenience sampling method was used to select respondents based on their availability and willingness to participate in the study. Participation is entirely voluntary, and responses are anonymous.

# **Data Collection and Instrument**

According to Harris and Brown (2010), questionnaires are often seen as a more objective research method capable of producing reproducible results due to their large sample sizes. It was made up of 18 statements that were validated with the Cronbach's alpha test. The



questionnaire coefficient was determined to be 0.854. As a result, it is regarded as a trustworthy instrument. The questionnaire was divided into four parts. The first section is about demographic data. The second section examines the familiarity of students with GenAI. The third section explores the potential benefits of integrating GenAI into English learning in higher education, while the fourth section addresses its potential challenges. Students were asked to rate their level of agreement or disagreement with each statement on a 5-point Likert scale, with scores ranging from "strongly agree" (5 points), "agree" (4 points), "neutral" (3 points), "disagree" (2 points), and "strongly disagree" (1 point). The quantitative data were analyzed descriptively using percentages for a simpler understanding. Moreover, to collect qualitative data, an unstructured interview was undertaken. After the quantitative components of the questionnaire were completed, the themes that developed throughout the interview sessions were coded. A random sample of ten students was chosen to participate in an interview.

#### **Result and Discussion**

The respondents in this study are undergraduate and diploma students from 3 higher educational institutions in Bengkulu City, Indonesia. Most of them (85%, n = 249) are enrolled in state universities, while the remaining students (15%, n = 44) come from polytechnics. Additionally, 95.6% of respondents reported having used GenAI technology in a general context (not specifically for teaching and learning) at least once. Specifically, 54.3% reported using it for research, 34.6% for writing assistance, 31.8% for completing assignments, 28.4% for communication assistance, 13.8% for exam preparation, and a 1% minority for other purposes. Table 1 shows the demographic information.

Table 1. Demographic Information

Characteristics	n	%
Academic Level		
Undergraduate students	249	85
Diploma (Polytechnic)	44	15
Have used GenAI		
Yes	280	95.6
No	13	4.4
The Purpose of Using GenAI	· · · · · ·	
Research	157	54.3



Writing assistance	100	34.6
Course assignment	92	31.8
Communication assistance	82	28.4
Exam preparation	40	13.8
Others	3	1

As previously indicated, students' perception of how familiar the students are with GenAI, the potential benefits of integrating GenAI into English learning in higher education, and its potential challenges were discussed in this study. Table 2 demonstrates this.

No	Statement		Percentage (%)					
		SA	Α	N	DA	SDA		
1	I understand that generative AI technology has	16.4	31.4	44.4	6.8	1		
	limitations in its ability to handle complex tasks.	47.8						
2	I understand that generative AI technologies	14.3	27.6	47.4	7.5	3.1		
	such as can produce factually inaccurate output.	41.9						
3	I understand that generative AI technology can	13	27.3	45.7	11.6	2.4		
	produce output that is out of context or	40.3						
	inappropriate.							
4	I understand that generative AI technology may	16	27.3	48.1	7.5	1		
	rely too heavily on statistics, which may limit its	43.3						
	usefulness in certain contexts.							
5	I understand that generative AI technology has	9.6	24.9	44.4	14.3	6.8		
	limited emotional intelligence and empathy, and							
	therefore may produce insensitive or							
	inappropriate output.							

Table 2. Familiarity with Generative AI (GenAI)

As illustrated in Table 2, participants generally have a good understanding of GenAI technology, with positive percentages ranging from 34.5% to 47.8%, although the majority of respondents remain neutral (44.4% to 48.1%). Specifically, respondents had the highest positive percentage for the statement "I understand that generative AI technologies like ChatGPT have limitations in their ability to handle complex tasks" (47.8). The lowest percentage for considerations of emotional intelligence and empathy (34.5), indicating that while they generally understand that GenAI technology has limitations, they may not fully recognize the potential risks arising from the lack of emotional intelligence and empathy.

Moreover, the significant percentage of neutral responses in Table 2 indicates that while students are generally aware of generative AI and its capabilities, they may lack a deep



understanding or critical understanding of its limitations. This neutrality may indicate uncertainty or a lack of understanding about the potential and risks of GenAI as a whole, particularly in academic settings. These findings emphasize the importance of integrating digital literacy and the responsible use of AI into the curriculum, ensuring students not only utilize the technology but also critically analyze its outcomes and impacts.

To gain a deeper understanding of students' perceptions of the benefits of generative AI in English language learning, the questionnaire included a series of statements highlighting perceived benefits. These statements aimed to explore how often students believed GenAI contributed to various aspects of their learning experience, such as skill enhancement, time efficiency, and personalized support. The results are presented in Table 3.

No	Statement	Percentage					
		Always	Often	Sometimes	Rarely	Never	
1	I believe generative AI technology can improve my English skills in	21.5 56	34.5	37.9	5.8	0.3	
	general.	00					
2	Generative AI technology will not	15	33.8	39.9	9.9	1.4	
	hinder the development of my productive skills in English (Speaking and Writing)	48.8					
3	Generative AI technology will not	17.1	32.8	42.3	7.2	0.7	
	hinder the development of my receptive skills in English (Listening and Reading).	49.9					
4	I believe generative AI technology	26.7	33.9	36	2.4	1	
	can help me save time on doing English assignments.	60.6					
5	I believe generative AI technology	21.2	31.7	43.3	3.4	0.3	
	can provide me with unique insights and perspectives that I might not have thought of on my own when writing (or speaking) in English.	52.9					
6	I think generative AI technology	17.4	35.5	43.3	3.4	0.3	
	can provide me with personalized feedback and suggestions according to my English assignments.	5.,9					

Table 3: Potential Benefits Related to The Integration of AI Technology in English Language



7	Generative AI technology doesn't	19.8	35.5	38.6	4.8	1.4
	limit my opportunities to interact with others and socialize, so I'll still	55.3				
	have the opportunity to apply					
	English directly.					

Overall, the results indicate that respondents have a positive attitude towards the potential benefits of GenAI technology in English language learning. Specifically, respondents highly appreciate its perceived usefulness in saving time on English assignments (positive percentage 60.6%) and still having the opportunity to apply English directly (positive percentage 55.3%).

In addition to examining the benefits, this study also examined students' concerns regarding the adoption of generative AI in English language teaching. These statements were designed to identify potential challenges, such as dependency, anxiety, and information reliability. Table 4 presents a summary of the frequency of these concerns based on respondents' reports.

No	Statement	Percentage						
		Always	Often	Sometimes	Rarely	Never		
1	I feel anxious when I think about	6.8	22.9	47.7	17.7	5.1		
	using generative AI technology for	29.7						
	English learning on campus.							
2	I am worried about making	15	30	44	9.6	1.4		
	mistakes when using generative AI	45						
	technology for English learning on							
	campus.							
3	I could become too reliant on	13	22.2	39.6	18.4	6.8		
	generative AI technology in	35.2						
	completing English assignments.							
	The thought of relying on	16	26.6	39.9	13.3	4.1		
4	generative AI technology for	42.6						
	English learning makes me							
	uncomfortable.							
	I felt overwhelmed by the	7.2	13.3	57.3	18.8	3.4		
5	complexity of generative AI	20.2						
	technology used for English							
	learning on campus.							
		12.3	27	50.9	8.9	1		

Table 4. Potential Challenges Related to The Integration of AI Technology in English



6	I am concerned about the accuracy of the information provided by generative AI technology for English learning.	39.3				
	I feel uncomfortable when using	11.9	23.3	45.7	16.4	2.7
7	generative AI technology for tasks	35.2				
	that are important in English					
	learning.					
8	I worry about becoming too reliant	25.3	30	36.5	6.8	1.4
	on AI generative technology in	55.3				
	English learning.					

Statistical descriptions indicate that respondents show only minor concerns about the integration of GenAI in English language learning. The highest concern is whether students will become too dependent on GenAI technology in English language learning (55.3%), and the lowest concern is about the complexity of the generative AI technology used for English language learning on campus (20.2%).

Furthermore, to complement the quantitative results and gain a deeper understanding of students' perspectives, qualitative data were collected through interviews. These insights provide deeper context regarding students' attitudes, the underlying motivations behind their desire to use generative AI, and potential concerns regarding its application in English language learning.

#### What are the reasons behind students' willingness to utilize generative AI technology?

Many students expressed their appreciation for the direct and personalized support provided by GenAI tools like ChatGPT. Unlike traditional learning environments where teacher assistance may not always be sufficient, students felt that GenAI addressed this gap by acting as a reliable virtual tutor, ready to help at any time.

Excerpt 1:

"When I feel lost and can't find help from others, ChatGPT can be a great alternative." (a student majoring in healthcare).

This indicates that students highly value GenAI as a consistent, non-pressure, and readily available support system. This is consistent with the findings of Chan and Lee's (2023) study on the role of AI in providing personalized academic support.

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Students also cited time efficiency as their primary reason for using GenAI. GenAI helps them generate ideas quickly, summarize material, or explain difficult concepts, making the learning process more efficient.

Excerpt 2:

"I don't have to search for information for hours because I can immediately get explanations or examples related to my assignments." (an economics student)

This benefit aligns with research by Atlas (2023), which shows that students use AI to streamline academic work processes and reduce the time spent searching for information.

Furthermore, several students reported that GenAI gave them the confidence to practice and improve their English writing, especially when there was no direct feedback from the teacher.

Excerpt 3:

"ChatGPT helped me practice writing without fear of judgment. I could correct mistakes before handing in the assignment."

This aligns with research by Warschauer et al. (2023), which demonstrated that AI tools can create a judgment-free learning environment, allowing language learners more freedom to explore and revise their ideas.

Students majoring in English found GenAI helpful in memorizing vocabulary or strengthening their knowledge of language structures.

Excerpt 4:

"ChatGPT can generate short texts based on user-entered words, thereby helping students memorize those words". (a student from the English Department)

This demonstrates how learners can creatively use GenAI to improve vocabulary and enrich contextual learning, which aligns with the mobile-based language learning practices studied by Pham et al. (2018).

What are the reasons behind the students' concerns or lack of concerns regarding generative *AI* technology?

In line with the quantitative results, qualitative data also revealed a lack of concern regarding the challenges associated with GenAI. Some participants are optimistic about the integration of AI in the future. One of the reasons behind this optimism is the assumption that humans will still maintain control and oversight over GenAI. One respondent commented, "I'm not too worried, because humans will not be replaced by this tool."

However, more than half of the participants still have concerns about the challenges in integrating GenAI technology, particularly regarding the accuracy of the information produced and ethical issues. Currently, GenAI can quickly provide smooth and human-sounding responses, but its accuracy cannot always be guaranteed. The primary concern raised by the students was the potential for inaccuracies or misinformation to be generated by the GenAI tool. While GenAI was capable of producing fluent and structured answers, the students noted that the factual accuracy of the generated content was not always guaranteed, "We cannot accurately predict or verify the accuracy of information generated by AI."

This concern aligns with findings by Kumar (2023) and Lubowitz (2023), who noted that while AI-generated content often sounds logical, it can contain incorrect references or factual errors; therefore, human oversight remains crucial.

Several students expressed concerns about ethical aspects, particularly plagiarism and academic integrity. With the advancement of AI technology, they worried that distinguishing between manually created work and AI-generated content would become increasingly difficult. "Right now, detecting plagiarism is still easy, but as technology continues to advance, maybe in the future it may no longer be so easy," they said.

This aligns with research by Zhai (2022) and Peres et al. (2023), who warned that generative AI poses serious risks to the validity of assessment results, particularly in writing assignments, due to its ability to generate content that is difficult to detect.

# Conclusion

This research investigates students' views on the application of generative AI tools (GenAI), such as ChatGPT, in English language teaching at the higher education level. With an explanatory sequential mixed-methods approach, these results show that most students are not only familiar with GenAI tools but also exhibit high enthusiasm for their use in an academic context. They highly appreciate the assistance provided by GenAI in improving writing skills, supporting research, enriching vocabulary, and saving time.



This optimistic view is supported by students' trust in the potential of technology to offer personalized learning support according to their needs and complement their formal education. However, this research also highlights legitimate concerns, particularly regarding the accuracy of AI-generated content, the potential for excessive dependence, and ethical issues such as plagiarism and academic dishonesty. While some students remain confident and believe that wise use will reduce these risks, others call for greater awareness and stricter regulations in its implementation.

These findings emphasize the need to provide students with digital literacy and ethical awareness in the responsible use of GenAI. Educators and policymakers need to harness the advantages of this technology while addressing existing risks with clear guidelines, proper integration into the curriculum, and ongoing evaluation of its impact on education. Through careful implementation, GenAI can become a powerful instrument in enhancing a more effective, independent, and relevant English learning experience in higher education.

#### Suggestion

Future research should address the limitations of this study by using a larger and more diverse sample. Additionally, future research could explore specific student groups from various disciplines, academic backgrounds, age groups, or cultural contexts related to AI literacy. Overall, there is a need for further research to understand better how to integrate generative AI into higher education while minimizing potential risks related to information validity and ethical issues. By exploring these areas, we can ensure that these technologies are used responsibly and effectively in the context of teaching and learning.

#### Acknowledgment

This article is the outcome of a research project funded by the PNBP of Bengkulu University in 2024. We extend our sincere gratitude to the LPPM of Bengkulu University and UPP FKIP for facilitating this research, as well as to the students who participated in the data collection process.

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