



Users' perceptions on Poly.AI: A qualitative study into students' and teacher's experiences

Abdul Halim¹, Irfan Hafidh²

^{1,2}Universitas Muhammadiyah Kalimantan Timur

Jl. Ir H. Juanda 15 Samarinda, 75123, Indonesia

Corresponding email: ah918@umkt.ac.id

ABSTRACT

As artificial intelligence (AI) is being used more and more, thus in order to prevent exploitation, we need to be able to use and deploy it as efficiently as possible. An artificial intelligence program called a chatbot can mimics human speech and writing. Chatbots may be integrated into the field of education when utilized properly by educators and students. This study investigate the perception of teachers and students of MAN 1 Samarinda of the Integration of Poly.AI in educational practices. The purpose of this study is to investigate how high school teacher and students perceive Poly.AI in education. This study employs a Qualitative approach with in-depth interview as its research instrument. The obtained data is analyzed using thematical coding to discover the theme and topic related to answer the researchers question, such as how teacher and students precieve Poly.AI in terms of usability, effectiveness, learning experience, and what challenges they encounterd while using Ploy.AI during educational practices. The research is expected to contribute to the on going disccusion of how AI in general could affect and improved the educational field in digital era. In general the integration of Poly.AI has been well percieved by teachers and students in MAN1 Samarinda and proven to be an effective and entertaining study and teaching tools, as it could assist teacher deliver role-play related topics and help students improved them self in English.

Keywords: Artificial Intelligence, chatbot, Poly.AI, education, teacher, student.



This work is licensed under Creative Commons Attribution License 4.0 CC-BY International license

ISSN 2655-9722, DOI: 10.30650/ajte.v6i2.4020

INTRODUCTION

1.1. Introduction

In recent years, artificial intelligence (AI) has significantly influenced various aspects of education. The applications of AI in education highlight the potential for huge advantages that are made possible with intelligent Systems (Kamalov et al., 2023), with promise of enhancing learning experiences and improving educational outcomes for both students and instructors (Ouyang & Jiao, 2021). AI and education provide transformational opportunities that influence learning outcomes, administrative functions, and instructional approaches in a variety of educational situations (Tapalova & Zhiyenbayeva, 2022). Personalized learning environments are one obvious way artificial intelligence is changing education (Owan et al., 2023).

AI technologies provide significant advantages in enhancing administrative functions in educational establishments, in addition to their pedagogical uses. Routine processes like financial aid processing, enrollment administration, and student admissions was automated by AI-powered systems, which opens up resources for more important projects (Saaideh, 2023). Furthermore, enabling administrators to anticipate enrollment trends, maximize budgetary allocations, and promote data-driven decision-making procedures, predictive analytics tools promote proactive institutional management. AI in educational settings enhances the effectiveness of evaluation techniques and feedback systems. Teachers' time spent evaluating essays decreased down when they use AI-powered grading systems that evaluate student essays and offer feedback on grammar, structure, and topic (Huang et al., 2023). Additionally, instructors was able to monitor student progress, improve educational interventions, and foster metacognitive competencies necessary for both academic achievement and lifetime learning by utilizing real time feedback mechanisms made possible with AI algorithms.

AI has been used in education for over a decade, therefore it's not new. But thanks to recent developments in artificial intelligence, programs like ChatGPT that can accurately mimic human writing abilities has been developed (Cotton et al., 2023). Language comprehension, human-like dialogues, adaptability to a particular language task, swift replies, and cost-effectiveness are some of ChatGPT's advantages (Rudolph et al., 2023). Large Language Model (LLM) are able to aid with writing assignments and foster critical thinking and problem-solving abilities, especially for students in higher education (Kasneji et al., 2023).

Among's other AI-based applications like ChatGPT that have been contributing to academic advancement, Poly.AI also stands out as a platform that has potential to facilitate interactions for both teachers and students. Unlike ChatGPT which centralized in terms of writing, Poly.AI offers the same experience with an addition of voice assistance which enrich users experience and making their conversation with the chatbot more engaging and immersive (Ivan Vulić, 2019). According to their website, Poly.AI mission is to overcome language barriers through out data-driven and language-invariant philosophy in structuring or organizing conversations (Ivan Vulić, 2019). Poly.AI is one of many chatbot that has potential to facilitate educational practices with immersive interaction for both teachers and students, as its features are similar to ChatGPT. In addition of voice assistance, not only does it help with writing issues, Poly.AI also has the potential in improving students listening capacity with the help of their varied selection of character voice assistance the student can choose from provided by Poly.AI, which help the engagement issues in English classes especially in terms of listening practices.

This thesis seeks to increase knowledge about how high school teachers and students perceived Poly.AI in educational practices, how does it effect students' academic performance, how does it effect teachers involment in class, and their teaching performance during educational practices. Through utilizing in-depth interview, this study offers important insights into the complicated structure of Poly.AI adoption in high school settings. Legislators, technologists, and educators are able to benefit from the study's conclusions. Furterhmore, the research attempt to pinpoint potential value for improvement and innovation, advocating for a more informed and organized approach to integrate Poly.AI in educational practices. This has been contributing to the ongoing discussion about integrating artificial intelligence (AI) technology into education with the offer of a thorough analysis of how high school teachers and students utilize Poly.AI.

1.2. Research Questions

The three research questions have been developed to guide the inquiry and selection of research papers as follows:

- 1) How do students perceive Poly.AI in terms of usability, effectiveness, and overall learning experience?
- 2) Secondly, what are the teachers' perception on integrating Poly.AI into their teaching methodologies, and how do they perceive its impact on student engagement and learning outcomes?

- 3) Lastly, what are the common challenges and potential areas for improvement identified by both students and teachers regarding Poly.AI?

1.3. Significant of the study

1.3.1. Theoretically

This study contributes to the theoretical understanding of the role of artificial intelligence (AI) in education. By exploring users' experiences with Poly.AI, the research sheds light on how AI-driven educational tools impact teaching and learning processes, thus enriching theoretical frameworks in the field of educational technology (EdTech) and AI in education. The findings of this study are able to inform pedagogical practices with the insights of how AI technologies like Poly.AI influence instructional strategies, student engagement, and learning outcomes. Understanding the nuances of user experiences with AI-powered educational tools has help educators design more effective teaching interventions and personalized learning experiences. Through qualitative research methodologies, this study prioritizes the voices and experiences of users (students and teachers) in shaping the design and implementation of Poly.AI. With the adoption of user-centered approach, the research contributes to the development of AI technologies that are more responsive to the needs, preferences, and challenges encountered by educational stakeholders.

1.3.2. Practically

Insights gained from this study are able to inform the refinement and optimization of Poly.AI and similar AI-powered educational platforms. Through the identification of usability issues, areas for improvement, and effective integration strategies, the research provides actionable recommendations for developers and designers to enhance the functionality, effectiveness, and user satisfaction of AI-driven educational tools. Understanding instructors' perspectives on integrating Poly.AI into their teaching methodologies has provide valuable guidance for professional development initiatives. Educators are able to benefit from insights into best practices, challenges, and strategies for leveraging AI technologies to enhance teaching effectiveness, student engagement, and instructional support.

The findings of this study contribute empirical evidence to inform decision-making processes at educational institutions and policymaking bodies. As the resercher documented the impact of Poly.AI on teaching and learning experiences, the research enables stakeholders to make informed decisions

regarding the adoption, implementation, and scaling of AI-driven educational technologies within diverse educational contexts. Through the analysis of user experiences in a range of demographic categories, this research highlights the differences in the accessibility, application, and results of AI-driven learning resources. Addressing issues of equity and inclusion in the design and implementation of Poly.AI has help ensure that AI technologies contribute to more equitable educational opportunities for all learners.

1.4. Literature Review

Artificial intelligence (AI) has emerged as a transformative force in education. Within this field, Poly.AI represents a notable platform designed to facilitate interactions between students and instructors through intelligent algorithms. This literature review explores the broader context of AI in education and examines existing research related to Poly.AI and similar AI-driven tool in education, focusing on its usability, effectiveness, and implications for teaching and learning.

According to (Abu Shawar and Atwell, 2007), a chatbot system is a software application that communicates with people in natural language. Chatbots are capable to understand one or more human languages and simulate verbal or textual communication with human users. Alternative terms for chatbots include artificial conversational beings, digital assistants, interactive agents, and intelligent bots. According to (Adamopoulou and Moussiades, 2020), they have a wide range of uses in business, education, information retrieval, and e-commerce. A number of methods are used in the creation and development of a chatbot, such as machine learning algorithms, natural language processing, and correct knowledge representation (Adamopoulou & Moussiades, 2020). Several platforms, such as RASA, Botsify, Chatfuel, Manychat, Flow XO, Chatterbot, Pandorabots, Botkit, and Botlytics, can be used to construct chatbots. These platforms offer unique features and functions that let developers create chatbots that are tailored to certain needs and goals.

Considering chatbots are able to provide customers with automated support and help, they have become incredibly popular in recent years. These chatbots are accessible to a wide range of users since they are able to be integrated into several platforms and systems, such as social media channels, messaging applications, and websites. Chatbots are anticipated to become more essential in enhancing customer satisfaction across a range of everyday living domains as technology develops (Park et al., 2022). Through the use of large datasets and machine learning techniques, AI chatbots are programmed to produce a variety of responses to chat inquiries, improve customer happiness, and lower contact center costs.

Conversational agents (CAs) powered by AI as the primary means of customer care engagement channels are replacing traditional telephone services manned by human agents. Artificial intelligence chatbots are able to learn from their conversations in real time, which allows them to adapt to new situations and patterns as they arise. Notable instances of AI chatbots are ChatGPT, Bing Chat, and Perplexity AI.

A cutting-edge AI platform called Poly.AI provides voice assistants made for daily life usages. Poly.AI's website states that their mission is to break down language barriers through data-driven, language-invariant conversation structuring (Ivan Vulić, 2019). The platform offers both writing and voice-centric interactions in several languages, including English, Indonesian, Japanese, and others, by combining retrieval and generative AI models. Additionally, it provides a personal method of dialogue management that makes it possible to automate intricate exchanges. Furthermore, chatbots that use AI are often used for entertainment. The name "Poly.AI - Create AI Chat bot" is one of them.

In addition to its enterprise-focused services (Ivan Vulić, 2019), Poly.AI offers a consumer-focused application named "Poly.AI - Create AI Chat Bot". Through the use of realistic vocalizations, this program enables users to connect with artificial intelligence avatars and engage in discussion, content creation, and engaging interactive conversations. The software creates an immersive environment that mimics interactions with real people by providing authentic vocalizations and cognitive functions of characters. It can also support several languages and offers a variety of in-app purchase options to meet varying access and functionality levels.

One of the example research of Artificial Intelligence (AI) application According to Rahman et al. (2023) stated that the uses of ChatGPT in academic research, such as generating original ideas, summarizing lengthy texts to discover important results, and defining study themes. They did, however, note several drawbacks of utilizing ChatGPT to create an academic paper, including the possibility of inaccurate research gaps, queries, and issues. Furthermore, because ChatGPT cannot access datasets, it is unable to do statistical analysis. Therefore, rather of being utilized as a tool to create research articles on its own, the researchers advise using ChatGPT as an e-research assistant to enhance productivity and support a researcher's work. Furthermore, ChatGPT has the potential to greatly increase student productivity, according to Fauzi et al. (2023), by offering helpful resources and information, enhancing language proficiency, promoting teamwork, increasing time effectiveness and efficiency, and offering encouragement and support. However, human interaction and students' diligent efforts to study and achieve their academic objectives should be valued significantly more than ChatGPT, which should only

be used as a supplement. According to Gupta et al. (2023), ChatGPT showed a high degree of accuracy in generating original concepts for systematic reviews, indicating possible uses beyond the field of cosmetic surgery research. As per the authors' findings, ChatGPT may be employed for many purposes such as patient education, virtual consultations, preoperative planning, and postoperative care. It offers a straightforward solution to the complex issues faced in the plastic surgery profession.

Another previous research on the application of artificial intelligence (AI) in education was conducted; these studies shed information on how teachers and students see ChatGPT's use in the digital age of education. The majority of teachers and students are in support of ChatGPT's integration into the digital era of education (Elbanna & Armstrong, 2024). Teachers found ChatGPT to be a helpful tool for receiving prompt feedback, answering questions, and reducing effort. The ability of the chatbot to provide timely remarks, answer questions, and provide assistance outside of planned class times is highly valued by both instructors and students. However, there are questions regarding the reliability of the information provided by ChatGPT, as well as the possibility of losing personal interactions with teachers. Teachers and students acknowledge that ChatGPT was useful in educational settings for a number of reasons, including faster response times to common inquiries, more time for teachers to concentrate on more complex assignments, and instant feedback and academic help for students (Sok and Heng, 2023). But there are also significant drawbacks, including uncertainties over the reliability of the data offered by ChatGPT, the requirement for security and confidentiality of data, and the potential loss of personal contact between teachers and students (Alshater, 2023). To guarantee that ChatGPT is utilized in the classroom efficiently and safely, such problems need to be addressed.

The application of Artificial Intelligence has proven to be a huge impact in the field of education. However as the literature review state there are some drawbacks of their uses along the practices such as the uncertainties over the reliability of the data offered by the AI, the requirement for security and confidentiality of data, and the potential loss of personal contact between teachers and students (Alshater, 2023). The review also indicate that over use of ChatGPT can effects the students actual diligency and academic achievement as the use of AI is suppose to be suplemantry (Gupta et al., 2023). As Poly.AI is one of many similar chatbot like ChatGPT that offers many ways to engage in education, the researcher hopes to seek any potential value when Poly.AI is utilized within educational practices and also evaluates its weakness, gap, and challanges within its usability during educational practices.

METHODOLOGY

2.1. Research Design

The research design for this study involves a qualitative approach, employing in-depth interviews and thematic analysis to explore users' perspectives on Poly.AI, an intelligent chatbot system. Qualitative research is chosen due to its ability to provide rich, detailed insights into individuals' experiences, perceptions, and meanings associated with complex phenomena (Creswell & Poth, 2018). The research methodology was selected to align with the research questions, specifically to investigate students' Perception on the usage of PolyAI in academic scenario.

2.2. Participants

The total population of the participants are 945 students from MAN 1 Samarinda. Every grade at MAN 1 Samarinda has three classes with three separate majors: social sciences, religion, and science. There are approximately 35-36 students, comprising both male and female, in each class. Due to constraints and requirements from the school, the researcher decided to perform research in grade X (10). Teachers and students were instructed to participate in-depth interviews in order to collect data of their experiences with the usage of PolyAI during classes. The participants for this study are drawn from a diverse pool of students and instructors who have actively engaged with Poly.AI in their educational practices. Approximately 5 students and 1 of English instructors were recruited for the interviews.

2.3. Instrument

In this study, researcher uses an in-depth interview to explore users' perspectives on Poly.AI usage during their academic practices. The interview protocol consists of a series of questions and prompts designed to guide the interview process and facilitate the exploration of key themes and topics, which are experiences, perceptions, and opinions regarding various aspects of Poly.AI, including its usability, effectiveness, impact on teaching and learning, and areas for improvement. The protocol is semi-structured, allowing flexibility for probing follow-up questions and capturing spontaneous responses from participants.

2.4. Data collection process

In-depth interviews have served as the primary method of data collection. These interviews were conducted in person, as per the consent of the participants. A set of open-ended questions were used to guide the interviews, allowing participants to express their experiences, perceptions, and opinions regarding various aspects of Poly.AI, including its usability, effectiveness, impact on teaching and learning, and areas for improvement.

2.5. Data analysis

Audio recordings of the interviews were transcribed literally to create written transcripts. Transcription ensures accuracy and enables detailed examination of participants' responses. The transcripts have been analyzed using thematic coding, a method of systematically identifying and labeling recurring themes, concepts, and ideas (Braun & Clarke, 2006). Coding involves segmenting the data into meaningful units and assigning descriptive labels to capture key concepts. As the coding is completed, similar codes have been grouped together to create broader themes or categories. This process of data reduction condenses the large volume of textual data into manageable units, making it easier to identify patterns and trends (Ngulube, 2015). Themes were further developed and refined through iterative review and comparison of coded segments. Researchers have examined the relationships between themes and considered their relevance to the research questions and objectives (Braun & Clarke, 2006). The final step involves interpreting the themes in relation to the research questions and broader theoretical frameworks (Braun & Clarke, 2006). Researchers have analyzed the implications of the identified themes, considering their significance for understanding users' perspectives on Poly.AI.

FINDINGS AND DISCUSSION

3.1. Findings

The purpose of this study was to investigate how teachers and students felt about using Poly.AI in a learning environment. It specifically addressed the following three main research questions: What perceptions do students have using Poly.AI's usability, effectiveness, and general educational experience? Furthermore, how do teachers see the integration of Poly.AI into their teaching methods, and what effect does it seem to have on student engagement and academic outcomes? Finally, what are the most common

problems and possible areas for development with Poly.AI that have been brought up by both teachers and students? The results provide a thorough analysis of Poly.AI's advantages and disadvantages, providing insightful information on how it might improve teaching methods and pinpointing areas in need of more research and assistance. The interviews and analysis were conducted using in-depth interview and thematical analysis method.

Students dan teachers perception on Poly.AI

Compatibilty and benefits of Poly.AI for students and user characteristics

Students, particularly those with introverted characteristics, exhibit excellent compatibility with Poly.AI. For introverts, the introduction of this technology is really helpful as it supports personal growth and increases their motivation to learn. However, it was challenging for students to discover their favorite characters in Poly.AI based on their personal hobbies and interests, especially fictional characters from movies or social media, and due to a lack of resources, students with low motivation find it difficult to use Poly.AI to learn English. Furthermore, there exist limitations in Poly.AI's capacity to facilitate interactive connections between teachers and students, suggesting restrictions in this field.

“Poly.AI has the potential to reveal hidden potential in English for students who tend to be introverted.” (Teacher, May 29th, 2024)

“In my opinion, this application is very suitable for me who is quiet or introverted, because it can help my communication problems with an AI system that can simulate chat like Poly.AI.” (Student 1, June 16th, 2024)

“I feel my interest in using Poly.AI is lacking, because I didn't find a character that suited my tastes to talk to.” (Student 2, June 16th, 2024)

“Not all students in the class have the motivation to learn English, or basically not all of them are interested in language.” (Teacher, May 29th, 2024)

“In my opinion, interaction in class, such as exchanging feedback from teacher to student or vice versa, is quite difficult, because there is not much that Poly.AI can facilitate with just its chat-based system.” (Teacher, May 29th, 2024)

The Role and Effectiveness of Poly.AI in English Language Learning

Poly.AI is crucial to the improvement of users' English language proficiency. Through chat-based interactions with different characters in Poly.AI, this technology helps with vocabulary, grammar, and textual practice. It also helps with the understanding and repetition of dialogue or conversation-themed material in English through conversations with different characters in Poly.AI and the various scenarios it offers. Poly.AI's replies are deemed to have high language quality, and generally, Poly.AI supports learning objectives effectively. However, its efficiency could change based on the situation and the user's particular requirements.

"This application really allows me to train my texting speed, practice grammar improvement, and acquire new vocabulary in my English learning." (Student 1, June 16th, 2024)

"In my opinion, Poly.AI can be used on certain English language materials, especially those with dialogue themes. We can simulate anything that has a conversation theme, and that can train us to better master aspects related to dialogue or conversation." (Teacher, May 29th, 2024)

"The response I received when using Poly.AI was very good, the language structure they displayed was very easy to understand, and simple for my category, which is still at an intermediate level in learning English." (Student 4, June 16th, 2024)

Integration of Technology and Digital Learning

Poly.AI is a digital learning media option that has a lot to offer when it comes to incorporating technology into traditional teaching methods. In general, AI technology improves access and the integration of many viewpoints throughout the learning process. The successful integration of Poly.AI with modern learning styles and practices highlights how well this technology may assist learning communities. In addition, the advantages of AI technology include the capacity to integrate many viewpoints into learning and the support of faster and more efficient information access.

"Poly.AI can be an alternative option for fellow teachers at other madrasah, where they can develop it into an assisting tool in certain theme such as the theme I explained earlier, namely dialogue or conversation, and help in the role-play aspect for students in their school especially." (Teacher, May 29th, 2024)

“In my opinion, I can use Poly.AI to encourage my students to improve role-play, and it can make the learning environment, especially with conversation themes, better.” (Teacher, May 29th, 2024)

Ease of Use and Technology Challenges

The simplicity of use of Poly.AI are well recognized, and this is particularly beneficial for users who don't speak English as their first language. But there are still obstacles, particularly for new users, some of whom encounter technical issues or constraints because they are unfamiliar with Poly.AI. Other difficulties include limits on the development of listening skills and issues with their devices. In addition, there are problems with Poly.AI data accuracy in educational contexts, the historical significance of the technology, and challenges for students who are not familiar with texting based technology.

“I think the application is very easy to use, especially for students who might be able to master it more because it is simple.” (Teacher, May 29th, 2024)

“When I used Poly.AI there was a slight problem with my keyboard display when typing, I think the problem only occurred when I used Poly.AI, otherwise it wasn't a problem.” (Student 3, June 16th, 2024)

“Because I rarely use applications similar to Poly.AI, I had quite a hard time using it at first.” (Student 4, June 16th, 2024)

“In my opinion, Poly.AI has shortcomings in the listening aspect, some characters don't seem to have a text to speech feature, and I think that's such a waste of potential.” (Teacher, May 29th, 2024)

“There was a certain time when I tried to talk to a historical figure, at that time he stated something which was not in accordance with what was written in history, and I think that made me confused.” (Student 1, June 16th, 2024)

“My problem is more of a personal problem with texting-based technology like this. To be honest, this is the first time I've tried it and I'm still trying to adapt.” (Student 4, June 16th, 2024)

Role-Playing and Interaction in Learning

When it comes to the academic side of language learning, role-playing is a technique that simulates realistic scenarios in which students must interact and communicate in the target language during studies. Due to its ability to provide students with more realistic and meaningful language practice, this approach is highly beneficial for teaching foreign languages.

When compared to traditional methods of learning, role-playing with Poly.AI has proven to be more successful in terms of character changes and dynamic interactions. The impact of characteristics and communication on AI role-playing enhances the educational process. Further research into the implementation of audio-based interaction with Poly.AI is fascinating as well, as it offers flexibility in the learning method for the English listening element.

“In English learning, themes related to role-play tend to be very difficult to address, due to the lack of relevance that we can bring to this topic, with Poly.AI, we can open up new development opportunities for the role-play aspect. as Poly.AI facilitates very dynamic interactions for the role-play scope.” (Teacher, May 29th, 2024)

“As I said before, Poly.AI has shortcomings in the development of the listening aspect. If in the future the developer of this application might add this feature to all the characters there, that would be good in my opinion. Students can also develop their listening skills.” (Teacher, May 29th, 2024)

Socialization and Entertainment with Poly.AI

In addition to its educational benefits, Poly.AI has socializing and entertainment value. Through AI, this technology facilitates sociability by enabling users to connect in a comfortable and enjoyable manner. The adaptable nature of Poly.AI in a range of professional and informal situations is demonstrated by its usage for lighthearted conversation and amusement.

“Apart from the use of learning English, I also use it for casual conversations in my free time, and I think the interactions I have are very enjoyable.” (Teacher, May 29th, 2024)

“I also tried the chat patterns of other characters outside of my study hours, and I was quite impressed with how casual and natural the responses given by the Poly.AI characters were. Honestly, this conversation from Poly.AI was quite enjoyable because it felt like talking to a real person.” (Student 4, June 16th, 2024)

Stigma and Motivation in English Language Learning

Although there is still a stigma associated with English language learners, Poly.AI provides a solution that can boost motivation for studying. With several features and benefits, Poly.AI is good for individual usage and are able to encourage young people’s interest in English language learning. Additionally, this technology offers teachers of madrasah high schools and other educational institutions better functioning; yet, there is still room for improvement in terms of educating the youth and drawing them in with the use of English.

“One of the challenges in learning English, especially in our learning culture, is that people who study English tend to be seen as arrogant.” (Teacher, May 29th, 2024)

“I think Poly.AI is quite interesting to me, because most of the time I want to learn English, especially when it comes to dialogue, I have quite a hard time simulating what I need to learn from that theme.” (Student 1, June 16th, 2024)

“I am quite interested in Poly.AI because of their AI-based applications, which I mentioned at the beginning that they have the potential to advance further in industrial, health and educational aspects.” (Student 1, June 16th, 2024)

“In my opinion, even though I think Poly.AI is good, I think they still have shortcomings in terms of attracting the attention of young people. They may need to advertise their application so that it can be recognized by users from other age groups too.” (Student 5, June 16th, 2024)

Common Challenges and Area for Improvement on Poly.AI

Technology Evaluation and Comparison

Although Poly.AI has a lot of promise for English language acquisition, further research is necessary. Poly.AI has several drawbacks that ChatGPT has over Poly.AI, such as the lack of text-to-

speech or sound playback feature over several character in their selection. Aside from that, ChatGPT's greater level of intelligence engine than Poly.AI's enables it to provide recommendations or answers to queries with the fewest possible mistakes. Since Poly.AI characters still frequently make mistakes while responding, evaluating verbs in the context of usage is also crucial to guaranteeing the precision and applicability of the language employed.

“As I said before, Poly.AI has shortcomings in the development of the listening aspect. If in the future the developer of this application might add this feature to all the characters there, that would be good in my opinion. Students can develop their listening skills.” (Teacher, May 29th, 2024)

“Basically, the Poly.AI system is more or less similar to ChatGPT, but in terms of the accuracy of the data provided by Poly.AI, I think it is still far from the quality of data accuracy provided by ChatGPT.” (Student 1, June 16th, 2024)

“Several times when I tried to chat, sometimes the characters responded with responses that did not match what I asked, and made the flow of the conversation feel strange for me.” (Student 4, June 16th, 2024)

Poly.AI Limitations and Need for Limitations in the Use of Technology

There are still issues with using Poly.AI in classroom engagements, notable among them being the small selection of characters available for educational discussions. Another issue is the limitations of employing Poly.AI for content retention. To maintain a suitable and safe learning environment, restrictions on the display of improper characters and material are also necessary.

“I feel that Poly.AI is still lacking in the aspect of interaction in an educational context, as the majority of the characters there are characterized as entertainment characters, and I am not happy with the response provided by characters who have an educational background with poor data accuracy.” (Student 3, June 16th, 2024)

“for repetition of material, I think Poly.AI only excels in the field of dialogue and themes related to role-play in English, I don't think I can recommend Poly.AI's development for other themes so far.” (Teacher, May 29th, 2024)

Overall, Poly.AI offers many benefits in English language learning and socialization, but also has some challenges that need to be overcome to improve effectiveness and user experience.

3.2. Discussion

This study explained the perception of teachers and students on the use of Poly.AI in educational field during the digital era. The integration of Poly.AI in education during the digital era are generally positive. Poly.AI viewed as a very helpful tool by teachers and students to assist them in certain topics within English learning, primarily dialog related topics within the curriculum. Teachers and students also value the chatbot's capacity to offer relevant feedback and engage students outside of scheduled class times. But there are questions over the reliability of the data Poly.AI provides as well as the possible interaction loss between students and teachers. To guarantee that Poly.AI is utilized in the classroom efficiently and safely, these issues must be resolved.

These findings are consistent with Alshater's (2023) earlier studies on the effect of AI on academic achievement. According to the research, artificial intelligence (AI) has the potential to greatly improve academic achievement, especially when used to academic research. However, the purpose of this research was to see how AI engage students and teachers in educational practices and too see how it affects students' academic performance in the area of English language learning. Despite the population studied and the research objective differed between this study and Alshater's (2023) study, both provided strong evidence that artificial intelligence (AI) significantly improved academic achievement. Through establishing how AI, and especially Poly.AI, to be a useful tool in boosting English language learning and improving overall academic achievement, this research made a substantial addition to the educational literature.

Moreover, Limna et al. (2023) investigated the same matter in a more focused investigation. In their study, Limna et al. (2023) examined how teachers and students felt about ChatGPT a particular artificial intelligence integrated into classrooms in the digital era. The study's findings showed that students' responses to the introduction of ChatGPT were overwhelmingly positive. Many teachers have pointed out that ChatGPT's instantaneous feedback and assistance have improved students' motivation and involvement in the learning process. This suggested that artificial intelligence (AI) may play a major role in enabling more dynamic and successful learning, where students felt more supported and motivated. The results of the investigation supported the usage of PolyAI as an English learning assistance. When used

effectively as a medium for entertainment, PolyAI has the ability to stimulate students' enthusiasm in learning English. After using PolyAI, there was a noticeable improvement in motivation of the students. This indicates the positive effect of Poly.AI for those who are lacking the motivation to study English language, resulting from the application of AI in education, including ChatGPT for instantaneous feedback and PolyAI to stimulate students' interest in learning English.

Furthermore, this study continued to be relevant to Shahdaz et al.'s results (2024). Shahdaz et al. (2024) investigated how students perceived social media and artificial intelligence in relation to their academic achievement. The publication claims that Chinese students believed AI had a big influence on their academic achievement. Study after study showed that students' academic performance increased when AI was included into their learning process. Shahdaz et al. also highlighted the significance of comprehending the connection between artificial intelligence (AI), social media, academic achievement, and mental health in the context of intelligent learning. Shahdaz et al. (2024) further emphasized that in order to maximize the advantages of this technology for society and students, it is essential to use a well-directed and led approach. This study showed that, when used wisely and positively, artificial intelligence (AI) apps, social media, and other programs that were not originally meant to be learning tools might be employed as tools to improve English language proficiency. Included in this was the use of PolyAI, which might prove advantageous if employed properly.

The results of Salido's (2023) research were equally relevant to this study. According to Salido's research from 2023, artificial intelligence (AI) has the power to completely transform the education sector by making it easier to tailor and customize the educational experiences of students. Students' understanding and academic performance improved as a result. This conclusion was in line with the results of the study that the researchers conducted, which showed the positive effects that AI including Poly.AI had on the learning process. Salido (2023) also emphasized the significance of resolving the digital divide and the availability of technology in many areas. It was essential to solve this issue in order to guarantee that the use of AI in education was carried out in a fair and equal manner. Salido (2023) emphasized the need to prioritize suitable technology accessibility in order to ensure that all students, especially those in less developed countries, would be able to fully benefit from AI. As such, it was critical to put policies in place to ensure that technology including Poly.AI was available to all segments of society. It was crucial to make the necessary investments in training programs and technological infrastructure to guarantee that all students could benefit from the AI-driven education revolution without facing limitations in access

brought on by the digital divide. Salido's (2023) studies generally showed a significant influence on the field of education.

Beyond its current use as an entertainment platform, Poly.AI are able to be used for a wide range of purposes. It could effective teaching tool if used properly. Teacher we're asked to integrate Poly.AI in their teaching methods, while students were asked to have quick English discussions with a range of characters that the researcher had chosen as part of this inquiry. With this approach, Teacher were able to identify how Poly.AI has help them in some aspect of teaching and students could practice their English in a fun and engaging settings while simultaneously learning about the use of technology in language learning. Several students and teacher provided excellent feedback and emphasized how excited they were to experiment with Poly.AI. This suggests that Poly.AI were able to ensure that the program is utilized in an ethically and morally sound manner while simultaneously creating a productive and inspiring learning environment for students and teacher.

CONCLUSIONS

4.1. Conclusion

The study's findings support the theory that Poly.AI has proven to be an effective teaching tool in the digital age. The chatbot's application in education was generally well-received by students as well as teachers. teachers expressed particular interest in how the chatbot may help them expand their use of role-playing in the classroom and improve their English teaching methods. However, questions were raised concerning the chatbot's accuracy and the possible loss of personal interactions with teachers. In order to guarantee the efficient and moral application of PolyAI in education, teachers and legislators must carefully consider the advantages and disadvantages of its usage. Additionally, teachers have to advise and instruct students on how to use PolyAI as an educational tool.

In addition, measures to resolve the issues brought up should be taken, such as enhancing the precision of the data that PolyAI offers and figuring out how to keep personal interactions between teachers and students. All things considered, this study presents insightful information on how teachers and learners see the application of Poly.AI in the classroom, along with suggestions for its application. Future studies might examine PolyAI's long-term impacts in the classroom and evaluate its efficiency in comparison to conventional teaching techniques.

4.2. Suggestion

Further research is needed to investigate the possible advantages and difficulties of chatbot adoption in learning contexts, even if the work makes a significant addition to the conversation about employing PolyAI in education. The results of these research may help shape the creation of evidence-based plans for implementing PolyAI in the classroom and offer perspectives for future technological progress in this field.

REFERENCES

- Abu Shawar, B., & Atwell, E. (2007). Chatbots: Are they Really Useful? *Journal for Language Technology and Computational Linguistics*, 22(1), 29–49. <https://doi.org/10.21248/jlcl.22.2007.88>
- Adamopoulou, E., & Moussiades, L. (2020). *An Overview of Chatbot Technology*. In *IFIP Advances in Information and Communication Technology*, 584 IFIP. Springer International Publishing. https://doi.org/10.1007/978-3-030-49186-4_31
- Alshater, M. (2023). Exploring the Role of Artificial Intelligence in Enhancing Academic Performance: A Case Study of ChatGPT. *SSRN Electronic Journal* <https://doi.org/10.2139/ssrn.4312358>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. <https://doi.org/10.1191/1478088706qp063oa>
- Cotton, D.R.E.; Cotton, P.A.; Shipway, J.R. (2023). Chatting and Cheating: Ensuring academic integrity in the era of ChatGPT. *Innov. Educ. Teach. Int.* 1–12. <https://doi.org/10.1080/14703297.2023.2190148>
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*. Sage Publications.
- Elbanna, S. and Armstrong, L. (2024), "Exploring the integration of ChatGPT in education: adapting for the future", *Management & Sustainability: An Arab Review*, 3(1), 16-29. <https://doi.org/10.1108/MSAR-03-2023-0016>
- Fauzi, F., Tuhuteru, L., Sampe, F., Ausat, A., & Hatta, H. (2023). Analysing the role of ChatGPT in improving student productivity in higher education. *Journal on Education*, 5(4), 14886-14891. <https://doi.org/10.31004/joe.v5i4.2563>.
- Gupta, R., Herzog, I., Weisberger, J., Chao, J., Chaiyasate, K., & Lee, E. S. (2023). Utilisation of ChatGPT for plastic surgery research: Friend or foe?. *Journal of Plastic, Reconstructive & Aesthetic Surgery*, 80, 145-147. <https://doi.org/10.1016/j.bjps.2023.03.004>.
- Huang, X., Zou, D., Cheng, G., Chen, X., & Xie, H. (2023). Trends, Research Issues and Applications of Artificial Intelligence in Language Education. *Educational Technology and Society*, 26(1), 112–131. [https://doi.org/10.30191/ETS.202301_26\(1\).0009](https://doi.org/10.30191/ETS.202301_26(1).0009)

- Ivan Vulić. (2019). *Towards Composing Multilingual Conversations*. *Poly.Ai*.
<https://poly.ai/resources/blog/towards-composing-multilingual-conversations/>
- Kamalov, F., Santandreu Calonge, D., & Gurrib, I. (2023). *New Era of Artificial Intelligence in Education: Towards a Sustainable Multifaceted Revolution*. *Sustainability (Switzerland)*, 15(16), 1–27. <https://doi.org/10.3390/su151612451>
- Kasneci, E.; Sessler, K.; Küchemann, S.; Bannert, M.; Dementieva, D.; Fischer, F.; Gasser, U.; Groh, G.; Günemann, S.; Hüllermeier, E.; et al. (2023). ChatGPT for good? On opportunities and challenges of large language models for education. *Learn. Individ. Differ.* 103, 102274. <https://doi.org/10.1016/j.lindif.2023.102274>
- Limna, P., Kraiwanit, T., Jangjarat, K., Klayklung, P., & Chocksathaporn, P. (2023). The use of ChatGPT in the digital era: Perspectives on chatbot implementation
- Ngulube, P. (2015). Qualitative data analysis and interpretation: systematic search for meaning. *Addressing research challenges: making headway for developing researchers*, 131, 156.
- Ouyang, F., & Jiao, P. (2021). Artificial intelligence in education: The three paradigms. *Computers and Education: Artificial Intelligence*, 2, 100020. <https://doi.org/10.1016/j.caeai.2021.100020>
- Owan, V. J., Abang, K. B., Idika, D. O., Etta, E. O., & Bassey, B. A. (2023). Exploring the potential of artificial intelligence tools in educational measurement and assessment. *Eurasia Journal of Mathematics, Science and Technology Education*, 19(8). <https://doi.org/10.29333/ejmste/13428>
- Park, D. M., Jeong, S. S., & Seo, Y. S. (2022). Systematic Review on Chatbot Techniques and Applications. *Journal of Information Processing Systems*, 18(1), 26–47. <https://doi.org/10.3745/JIPS.04.0232>
- Rahman, M., Terano, H. J. R., Rahman, N., Salamzadeh, A., Rahaman, S. (2023). ChatGPT and academic research: A review and recommendations based on practical examples. *Journal of Education, Management and Development Studies*, 3(1). 1-12. <http://dx.doi.org/10.52631/jemds.v3i1.175>.
- Rudolph, J.; Tan, S.; Tan, S. (2023). ChatGPT: Bullshit spewer or the end of traditional assessments in higher education? *J. Appl. Learn. Teach.* 6. <https://doi.org/10.37074/jalt.2023.6.1.9>
- Saaideh, M. (2023). AI-Driven transformations in higher education: Opportunities and challenges. *International Journal of Educational Research and Studies*, 5(1), 29–36. <https://www.researchgate.net/publication/370864917>
- Salido, V. (2023). Impact of AI-Powered Learning Tools on Student Understanding and Academic Performance.
- Shahzad, M. F., Xu, S., Lim, W. M., Yang, X., & Khan, Q. R. (2024). Artificial intelligence and social media on academic performance and mental well-being: Student perceptions of positive impact in the age of smart learning
- Sok, S., & Heng, K. (2023). ChatGPT for education and research: A review of benefits and risks. SSRN 4378735. <http://dx.doi.org/10.2139/ssrn.4378735>

Tapalova, O., & Zhiyenbayeva, N. (2022). Artificial Intelligence in Education: AIEd for Personalised Learning Pathways. *Electronic Journal of E-Learning*, 20(5), 639–653.
<https://doi.org/10.34190/ejel.20.5.2597>