

## **UNLOCKING THE POTENTIAL OF ARTIFICIAL INTELLIGENCE IN READING EDUCATION : EXPLORING PERCEPTIONS AND INNOVATIVE SOLUTIONS**

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### **ABSTRACT**

The swift advancement of technology has become an indispensable component of numerous facets of contemporary existence, including education. Artificial intelligence (AI) has the potential to greatly improve the learning experience in the realm of English reading comprehension. This research explores the author's analysis of the students' perspectives, challenges, and innovative solutions for integrating Artificial Intelligence (AI) in reading at SMA Asuhan Daya Medan. This approach employs a qualitative methods utilizing questionnaires and interviews. The questionnaire results indicate that 50% of the students strongly agree, 35% agree, and 15% have a neutral opinion regarding the utilization of AI in Reading Learning Assistance. Based on the data above, it determined that 50% of respondents expressed strongly agree, 40% agreed, and 10% voiced neutrality towards utilizing Artificial Intelligence (AI) Based Applications for enhancing reading proficiency. Students encounter a multitude of difficulties or obstacles. In the first place, the students are less interaction with teacher. Second, students' reliance on technology. One last issue pertains to the potential diminished efficacy of AI-powered applications in expressing emotions, particularly when deciphering text that evokes sentiments of happiness or sadness.

**Keywords :** Reading ,Artificial Intelligence ,Students Percpectives.

Pesatnya kemajuan teknologi telah menjadi komponen yang sangat diperlukan dalam berbagai aspek kehidupan masa kini, termasuk pendidikan. Kecerdasan buatan (AI) mempunyai potensi untuk meningkatkan pengalaman belajar dalam bidang pemahaman bacaan bahasa Inggris. Penelitian ini mengeksplorasi analisis penulis tentang perspektif siswa, tantangan, dan solusi inovatif untuk mengintegrasikan Kecerdasan Buatan (AI) dalam membaca di SMA Asuhan Daya Medan. Pendekatan ini menggunakan metode kualitatif dengan menggunakan kuesioner dan wawancara. Hasil kuisioner menunjukkan bahwa 50% siswa sangat setuju, 35% setuju, dan 15% berpendapat netral mengenai pemanfaatan AI dalam Bantuan Pembelajaran Membaca. Berdasarkan data di atas, diketahui bahwa 50% responden menyatakan sangat setuju, 40% setuju, dan 10% menyatakan netral terhadap penggunaan Aplikasi Berbasis Kecerdasan Buatan (AI) untuk meningkatkan kemampuan membaca. Siswa menghadapi

banyak sekali kesulitan atau hambatan. Pertama, berkurangnya interaksi siswa-guru. Kedua, ketergantungan siswa terhadap teknologi. Masalah terakhir adalah potensi berkurangnya kemandirian aplikasi berteknologi AI dalam mengekspresikan emosi, terutama ketika menguraikan teks yang membangkitkan perasaan bahagia atau sedih.

**Kata Kunci :** Membaca, Kecerdasan Buatan, Perspektif Siswa.

## **I. INTRODUCTION**

Language serves as a means of communication. Language is another sophisticated ability that requires four sub-skills: listening, writing, speaking, and reading skills; these skills are essential for communication. Reading is one of the Important skills in Acquiring English Language Skills, which should be implemented in all students to enhance their comprehension and Vocabulary skills. The effectiveness of students' performance in the subsequent efficacy of the educational process is predominantly contingent upon the proficiency of reading skills or abilities. (Rohana et al., 2020). It is an essential skill that accompanies us through our lives, serving us during school and various aspects of our daily existence (Hulya Kucukoglu, 2013). Reading comprehension is the cognitive process of deriving significance and understanding from written or printed material. The objective, therefore, is to acquire a comprehensive comprehension of the content rather than extracting meaning from individual words or sentences. (Rita Harisma, Masitoh Nasution, 2020). According to Tojiboyev Isaqjon Madoimovich (2022), Reading is a highly interactive process that allows learners to comprehend and grasp a text's overall meaning through various reading strategies.

When reading the material, students needed help with interpreting its meaning since they observed some vocabulary that they were unfamiliar with, which limited their ability to comprehend it. (Rafika Purba et

al., 2022) Nevertheless, acquiring reading skills is currently confronted with various obstacles. These include a significant number of students requiring additional time to improve their reading abilities, unconventional reading methods that disregard punctuation rules, and a need for more opportunities for students to engage in reading practice during class. An effective way to tackle this problem would involve utilizing Artificial Intelligence (AI) technology during reading-focused learning sessions.

The swift advancement of technology has become an indispensable component of numerous facets of contemporary existence, including education. Technology integration has become an indispensable component of the training procedure and is no longer considered inappropriate. Technology has been employed to augment and facilitate the learning process. According to a study conducted by Erna Iftanti and colleagues in 2023, the rapid progress of technology has had a profound impact on different aspects of our lives, enhancing the experiences of individuals at every stage. People of all ages have reaped numerous benefits from this remarkable technological progress. The utilization of technology in learning has become increasingly significant, as it proposes many advantages that contribute to more effective and efficient results.

Artificial intelligence, or AI, is a field of science that studies how machines, like

computers, can do things that people can do (Mariati,2024).Artificial intelligence (AI) has become increasingly prevalent in educational practices due to significant progress in computing and information-processing techniques (Fan et al., 2021). The incorporation of artificial intelligence (AI) into education has resulted in a comprehensive fusion of teaching and learning. In addition, it offered a valuable chance to revolutionize educational practices (Jiahui et al., 2021).In the field of education, the incorporation of new technologies has greatly transformed the methods of teaching and learning. (Zhang, Ayse Begum Aslan,2021).Implementing Artificial Intelligence (AI) enables the execution of learning activities at any moment. Being in the presence of AI-powered applications enables learning to occur at any moment and location, transcending space and time constraints. In addition, students can acquire reading skills from individuals with diverse speaking styles and accents, enhancing their comprehension. Incorporating Artificial Intelligence (AI) into language learning environments presents a wide range of opportunities for enhancing the four essential language skills: speaking, listening, reading, and writing (Rusmiyanto et al., 2023). Artificial intelligence (AI) has the potential to greatly improve the learning experience in the realm of English reading comprehension. Reading can greatly improve one's understanding of English reading comprehension. How one speaks, including tone, accent, and pronunciation, significantly impacts Reading.Conversely, by understanding the capabilities and features of AI technologies, teachers can implement appropriate AI applications in their classrooms to improve students' learning performance, motivation, or engagement (Gwo-Jen Hwang et al., 2020)

This research explores the author's analysis of the students' perspectives, challenges, and innovative solutions for integrating Artificial Intelligence (AI) in reading at SMA Asuhan Daya Medan.Students are the primary beneficiaries of utilizing this AI-powered application. It is crucial to understand What is the student's perspective on using applications based on artificial intelligence (AI)? Furthermore, what challenges do students encounter when utilizing applications powered by artificial intelligence? Based on understanding students' perspectives, enhancing their reading abilities in school is the most effective approach. It can offer students perspectives on using artificial intelligence (AI).This study aims to explore the use of artificial intelligence (AI)-based applications to enhance students' reading skills. Additionally, it wants to broaden students' understanding of the implications of Artificial Intelligence (AI) in the context of learning.

## **ii .RESEARCH METHODOLOGY**

### **Research Design**

This approach employs a qualitative methods utilizing questionnaires and interviews.In addition, qualitative data (such as interviews and focus groups) can contribute to the profundity of a research inquiry by providing narratives that provide a more profound understanding of the phenomenon under investigation. Qualitative research involves several methods of data collecting, such as documentation, interviews, surveys, focus group discussions, observation, participatory arrangements, and qualitative audio-visual material ( I Gusti Ayu Agung Omika Dewi,2021).

### **Research Population**

The population comprises not only individuals but also objects (Sukmawati et

al., 2023). The study population was 20 third-grade students at SMA Asuhan Daya Medan between the ages of 17 and 19. thus, the study uses the Simple Random Sampling Method. According to Shagofah Noor et al. (2021), Simple random sampling is a widely used sampling approach in scientific research. Individuals have an equal opportunity to participate in the study, just as they would in a simple random sample.

#### Instrument of Collecting Data

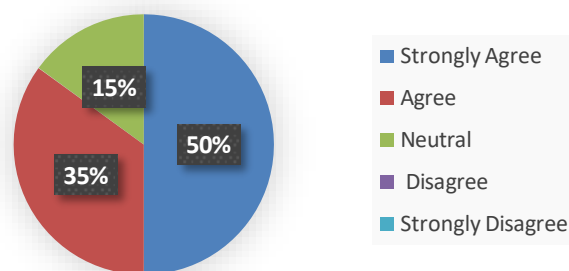
Researchers collected data through questionnaires and interviews. As part of the methodology that involved the use of a questionnaire, the researchers distributed 20 questions to pupils at school in the form of written or offline questionnaires. Interview methodology involves researchers approaching the school in person and posing inquiries. In the questionnaire method, researchers utilize a Likert scale to determine data.

### III.RESULT AND DISCUSSION

At the school, there is a sizeable proportion of pupils who are enthused about the incorporation of artificial intelligence technology into the reading process. The reason for this is that technology that utilizes artificial intelligence can provide feedback on word pronunciation in a very short amount of time, which in turn makes learning more effective and efficient. There are some pupils, on the other hand, who have the perception that they are not interested in utilizing Artificial Intelligence (AI) that is thought to be commonplace. Because there is no interaction between students and the teacher, who serves as the major facilitator, and the fact that the exclusive emphasis is placed on technology, the only way to make use of artificial intelligence technology in the learning process is to make use of it. If this

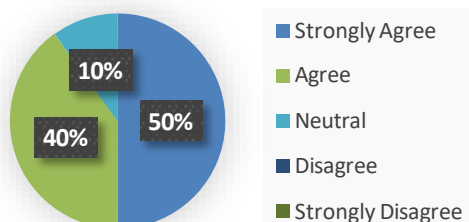
is the occurrence, it is of the utmost importance to take into consideration the viewpoints of pupils regarding the utilization of AI applications in the process of reading instruction.

**Student Perceptions Regarding the Importance of Artificial Intelligence (AI) in Reading**



The questionnaire results indicate that 50% of the students strongly agree, 35% agree, and 15% have a neutral opinion regarding the utilization of AI in Reading Learning Assistance. Research indicates that students exhibit incredible enthusiasm for utilizing AI in reading instruction since it enables them to acquire accurate pronunciation and facilitates the learning process. The utilization of artificial intelligence also offers feedback on sentences by employing suitable punctuation marks. Additionally, it serves as an alternate option due to the fact that having 20 students enables teachers and pupils to optimize their reading exercises. By utilizing AI-powered applications, Students who are not given an opportunity can utilize their time by engaging in training sessions using Artificial Intelligence (AI) tools

**Artificial Intelligence (AI) applications are a solution for improving students' reading comprehension**



Based on the data above, it was determined that 50% of respondents expressed strongly agree, 40% agreed, and 10% voiced neutrality towards utilizing Artificial Intelligence (AI) Based Applications for enhancing reading proficiency. Based on this data, artificial intelligence (AI) applications can offer accurate pronunciation depending on the phrases used. This program aims to enhance students' reading proficiency by enabling them to identify and effectively pronounce challenging words encountered during reading exercises, utilizing Artificial Intelligence (AI) tools.

In addition, the Voice Choices in Artificial Intelligence (AI) based applications exhibit diverse styles and accents to facilitate the development of speaking abilities and enable communication in various speaking styles. AI-powered applications can accurately interpret punctuation marks to help pupils develop proficient and accurate reading skills. Learning to Read Artificial Intelligence (AI) offers a solution for enhancing reading skills and providing opportunities to practice reading in several styles and accents.

Students encounter a multitude of difficulties or obstacles. In the first place, the students are less interaction with

teacher. When students utilize applications based on artificial intelligence (AI) for reading instruction, they are more inclined to use the functionalities of said applications without seeking guidance from the instructor or their peers. Students' face-to-face interaction with the surrounding environment will be diminished. Second, students' reliance on technology; since they are accustomed to utilizing applications powered by artificial intelligence (AI) for reading, they require this application for reading practice. Additionally, students may need help adjusting to the various accents and speaking patterns these features incorporate. One last issue pertains to the potential diminished efficacy of AI-powered applications in expressing emotions, particularly when deciphering text that evokes sentiments of happiness or sadness. The likelihood that applications powered by Artificial Intelligence (AI) will contribute to expressing emotions is diminished. Additionally, intonation and emotion are vital to convey to the audience to ensure that the presented reading is well received.

#### **IV. CONCLUSION**

Based on the findings and subsequent discourse, three conclusions can be drawn. Students' perceptions of using applications based on artificial intelligence (AI) for reading instruction constitute the first. 50% of students Strongly agree, 35% agree, and 15% remain neutral about the significance of artificial intelligence in reading instruction. Furthermore, about the utilization of artificial intelligence (AI) to enhance reading proficiency, 10% of students hold a neutral stance, while 40% strongly concur. In conclusion, the issue at hand encompasses four challenges or problems: insufficient social interaction, overreliance on technology, and inadequate student adaptation to style and dialect—

diverse, ultimately gratifying emotions in reading instruction.

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