# Using Artificial Intelligence for Education in the Education 5.0 Era to Improve Reading Skills

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**Abstract**

This research aims to determine the use of ChatGPT for education in the Education 5.0 era in improving reading skills. ChatGPT can answer questions humanely, just like Google Nest; only Google Nest requires machines or tools like regular Google. This research uses quantitative methods, data obtained through interviews, and questionnaire distribution. Distribution of questionnaires using Google forms. The research results show that using ChatGPT for education in the Education Era 5.0 can benefit students, as evidenced by increased reading skills. From this research it can concluded that the use of ChatGPT for education has proven to be effective and efficient, the research proves this results that 80% of students have the highest scores. The limitation of this research is that the researcher only researched the use of ChatGPT for education in the Education Era 5.0 even though there are still many uses of other media that can be used as alternatives in improving students' reading skills.

**Keywords:** *Eduction Era, Use of ChatGPT, Google Nest Link, Reading Skill*

## Introduction

Technology has developed in every corner of the world of education. So, many applications have been found that can be used, developed, and utilized for learning media (Kouhizadeh et al., 2021). Technology is the result of the development of knowledge found in everyday life that can help and facilitate activities such as in the learning and teaching process (X. Zhang et al., 2018). Education should use available technology to help the teaching and learning process (Hadgraft & Kolmos, 2020), both the means and evaluation of learning Online-based learning media prove that technology can support the learning process (Schneider et al., 2018).

Technology is one of the advances in the era of globalization that helps the

development of knowledge and skills in learning and teaching (Jeevanandam et al., 2018). The development of technology also has good impact in the world of education. Technology supports all human activities to be more orderly, effective, and efficient, especially in education (Zhou et al., 2018). A basic need in life that is useful to facilitate internet-based activities is technology (Sishodia et al., 2020). The rapid development of technology has given rise to various learning media features to support the teaching and learning process.

Technology is increasingly advanced, and it has become one of the facilities and infrastructure in the teaching and learning process (Zibbell et al., 2018). The development of technology in the world of education has had a positive impact on learning, especially science (Hansen et al., 2018). Current technological developments in the world of education include many online-based learning media that can facilitate the teaching and learning process (Li et al., 2018). ). Learning methods become more interesting if the planned learning media are in accordance with students' learning needs to foster a critical mindset and create an enthusiasm for learning (Shorey & Ng, 2021). The positive impact of using media is that it can help students understand lessons and broaden their insight (Abbas & Sağsan, 2019). The development of online-based learning media is one form of current technological development that plays an important role in the world of education in the Education 5.0 Era, which can support the learning process better so that the learning objectives are achieved.

The important role of using ChatGPT in education can be an effective alternative for improving students' reading skills in the education 5.0 era (Marcolino et al., 2018). Learning media itself is a tool to support the learning process. Learning media equipped with attractive features that are easy for students to understand has positive impacts such as increasing students' understanding and fostering enthusiasm for learning (Shone et al., 2018). This online-based learning media is a form of technological progress in education, to make the material easy and understandable for students and the teaching and learning process becomes fun so that learning is in line with the teacher's interests. Learning media that fulfills the concept of providing convenience for students (Cipolla et al., 2018). Educators must be able to organize the reading process for direct and online-based learning. This helps students improve their reading skills by thinking about the correct words and sentences.

Media is an important factor in the learning process (X. Zhang et al., 2018). Online-based alternative learning media really helps the learning process, one of which is using ChatGPT for education in the Education 5.0 Era to improve reading skills (Karras et al., 2019). The learning media using ChatGPT for education in the Education 5.0 Era in improving reading skills aims to make the learning process not rigid, interesting and easy for students to understand (Silver et al., 2018). One of the impacts of this learning media is that it can improve students' reading skills so that learning objectives can be achieved well (Zafar et al., 2021).

The development of online-based learning media is a challenge for teachers, who must continue creating interesting learning media for students to achieve their learning goals (Gao & Zhang, 2020). The use of ChatGPT in the Era of Education 5.0 in improving reading skills uses a teaching method in the form of a quiz, which must

be answered by ChatGPT students, which produces learning media that can answer all the questions given to ChatGPT then the media is assessed by media, material and language experts in learning. Arabic.

ChatGPT is suitable for measuring the depth of students' reading comprehension of learning material (Graham, 2022). ChatGPT is equipped with numerical or statistical data that can determine students' abilities in understanding the material presented by teachers and lecturers (Schumacher & Ifenthaler, 2018). chatGPT is also equipped with interesting features that can answer questions so that learning becomes interesting and fun (Arabiourrutia et al., 2020). ChatGPT can improve reading skills in an interactive way that is easily accessible via devices such as smartphones, computers or other devices connected to the internet to make it easier for students to read what the teacher has created (Dong et al., 2020). ChatGPT can invite students to compete in a healthy manner while motivating students to read so that they can improve learning outcomes which can be seen from the quality of students in reading. This will motivate students to read in learning. ChatGPT is a medium for learning Arabic, equipped with interesting features so that participants do not feel bored when learning, especially when reading. ChatGPT produces learning media that can answer all questions.

The learning material on ChatGPT is useful for testing students' reading abilities (Sorby et al., 2018). ChatGPT aims to foster students' enthusiasm for reading in learning (Ghermandi et al., 2020). The characteristics of learning media are that the material is clear, the learning objectives are clear, and the system is clear (Plantin et al., 2018). ChatGPT aims to make it easier for teachers to deliver lesson materials and test students' reading skills (Radianti et al., 2020).

The advantage of ChatGPT is that it is easy for anyone to access anywhere (Grinberg et al., 2019). ChatGPT is equipped with an attractive design, so it is widely used as a medium for learning Arabic (Alva et al., 2018). The learning method using this application is one of the media to support learning material so that learning objectives are achieved and students can improve their reading skills as well (Chi & Yu, 2018). Students' abilities will be tested after using the ChatGPT application in learning media in the Education Era 5.0. Chat GPT education is an application that has many weaknesses and needs improvement, even though it uses AI technology and was developed by the OpenAI company.

ChatGPT has advantages and disadvantages related to the education era 5.0 (Oktay et al., 2018). Here are some examples: Advantages of ChatGPT in the Education 5.0 Era: Ability to provide fast and reliable answers: ChatGPT can provide fast and reliable answers to various questions in the education 5.0 context, because this model is trained with various data and information sources. Understanding of various topics: ChatGPT can understand various topics in education 5.0, including new concepts such as project-based learning, interdisciplinary collaboration, and the use of technology in learning (Cerbin-Koczorowska et al., 2021). Ability to provide useful suggestions and recommendations: Thanks to its intelligence, ChatGPT can provide useful suggestions and recommendations to improve the teaching and learning process in the era of education 5.0 (Volkert et al., 2019). Disadvantages of

ChatGPT in the Era of Education 5.0: In the context of education 5.0, ChatGPT can facilitate more personalized and adaptive learning for each individual. The following are some structures for using ChatGPT in education 5.0: Personalized Q&A: ChatGPT can be used as a personal assistant for each student or student in answering their questions about subject matter (Evans et al., 2021). In this case, ChatGPT will understand the student's profile and provide answers tailored to their learning needs.

Elsevier states that artificial intelligence models such as ChatGPT can be used to improve the readability and language of research articles, but cannot replace the main tasks that authors must perform, such as interpreting data or drawing scientific conclusions. (Fisher et al., 2020). Hormansyah also conducted the same research and Utama stated that Chatbot or ChatGPT is a computer program designed to stimulate interactive conversation or communication to users (humans) through text, voice or visuals. (Teede et al., 2018). Meanwhile, according to Holden Thorp, ChatGPT media is said to be of value by media, materials, and language experts in Arabic Language Learning, the editor-in-chief of the journal Science said that the publishing group is updating its policy to stipulate that any text produced by ChatGPT (or other artificial intelligence tools) cannot be used in work, but some images or graphics are products of this tool, namely ChatGPT. Artificial intelligence programs cannot be writers, he said. Therefore, the Independent page will quote things like this on January 30, 2023.

Several literature reviews have highlighted the role of AI in improving reading skills. Research by Miller shows that AI systems can provide reading material tailored to the reader's level of comprehension, allowing for a personalized learning approach (Miller, 2019). Similar findings are also supported by recent research conducted by Liu, which shows that AI can be used to identify difficulties experienced by learners in reading, thereby helping teachers to provide appropriate help on an individual basis. (Liu et al., 2019).

Similar findings are also supported by recent research conducted by Liu, which shows that AI can be used to identify difficulties experienced by learners in reading, thereby helping teachers to provide appropriate help on an individual basis. (Y. Zhang & Chen, 2020). By utilizing machine learning algorithms, AI can provide interesting and relevant learning content for each individual, thereby building a student-centered learning environment. However, several studies have also highlighted potential challenges that may arise with the application of AI in education. Chen's research underscores the importance of careful monitoring of the data used by AI systems, to ensure there are no biases or errors that could affect learning (Chen et al., 2020). In addition, several concerns related to data privacy and security also need to be taken seriously in developing AI systems for education.

Considering these findings, further research into the implementation of AI to improve reading skills in the Education 5.0 era needs to pay attention to aspects of further technological development, including the development of more accurate and user-friendly AI models and policies governing data use. in an educational context.

The reason for conducting this research is to re-examine the use of ChatGPT as a learning medium in the Education 5.0 Era. It is hoped that students can utilize learning media to improve their reading skills as best as possible to achieve learning

objectives. The use of ChatGPT for education in improving reading skills is suitable for use and is suitable for use by teaching staff in education and can also be considered to help the learning process and students' reading levels become high by using ChatGPT, because the learning media using ChatGPT is presented with interesting features as well as improving students' reading skills, and motivating reading so that students can understand learning well. Based on the explanation above, improvements need to be made regarding problems in improving reading skills, so researchers are trying to develop the use of ChatGPT for education in the Education 5.0 Era to improve students' reading skills.

## Method

Quantitative research is a type of research that uses a scientific approach to collect, analyze and interpret numerical data or quantitative data in order to understand or explain social, economic or scientific phenomena. The following is the general flow of quantitative research: Determine the research topic. Choose an interesting and relevant research topic to the social or scientific problem you want to research (Hwangbo et al., 2019). Formulate research questions and hypotheses that will be tested using quantitative data (X. Yang et al., 2019). Determine the research design. Select the appropriate research design to answer the research question and test the hypothesis (Horváth & Szabó, 2019). Research designs can be experiments, surveys, or case studies (Abd-Alrazaq et al., 2020). Selecting a research sample: Select a representative sample of the population you want to study. Samples must be selected objectively to avoid invalid data. Collect data using valid and reliable research instruments. Research instruments can be questionnaires, interviews, or observations. Statistical techniques that can be used include the t-test, ANOVA, regression, or multivariate analysis. Interpreting analysis results interpret analysis results systematically and logically.

**Figure 1. Quantitative research population and sample**
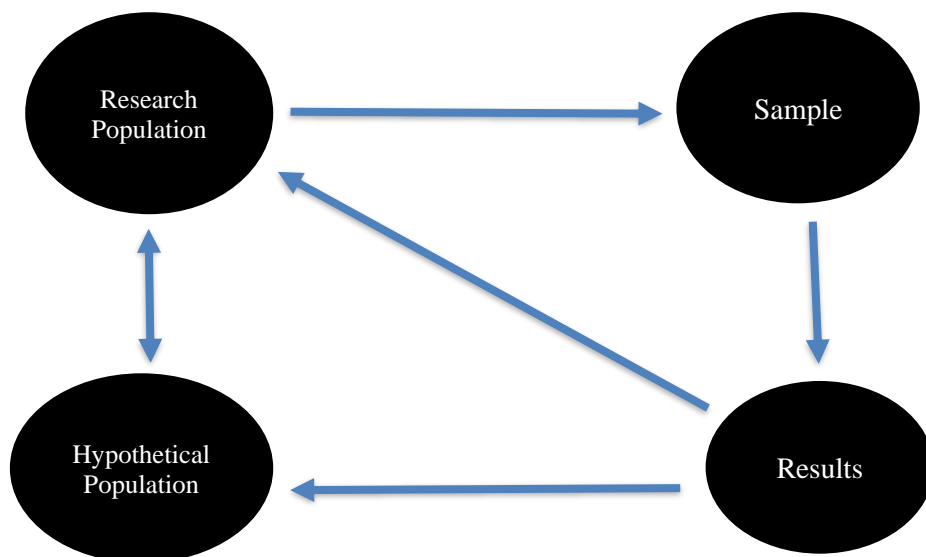


The time and place for research to collect data is at universities and schools.

The object of this research is the feasibility of the ChatGPT application in education in the Education 5.0 Era in improving reading skills (Moghanibashi-Mansourieh, 2020). The method used is quantitative research. This research is conducted at an educational institution or college to assess the suitability of the learning media used. Data collection is done by distributing questionnaires to students or learners to determine the percentage of suitability of the media for the students. Additionally, observations are carried out to understand the subject matter, the objects to be observed, the purpose of the research problem, preparation for the observations, determination of secondary data needed, and recording observation results. For example, this research is conducted in nearby colleges and schools.

The technique used by researchers in collecting data containing numbers is to collect information whose authenticity is measured, calculated and compared on a statistical scale. The data collected from observation respondents is a technique for analyzing quantitative research data. For example, the data processing process is based on the type of respondent. After that, the object is created, and the hypothesis test is calculated from the data obtained.

Quantitative research is complemented by statistical tests, namely inferential statistical tests, which are used during random data collection techniques and when the sample required is clear, and there are also descriptive ones, which are used to analyze data by describing and also describing the data that has been collected without changing the data source obtained. Inferential statistics has two important parts, namely parametric statistics, which have strong power in research if taken from data that has been fulfilled, and there are also non-parametric used in ordinary statistics to look at nominal data and also ordinal data from the data samples found. Also, identify conclusions from the analysis results and their relationship to the hypothesis and research questions.

## Result and Discussion

It uses ChatGPT as a learning medium and uses quantitative research methods. Quantitative methods are investigations that collect data using measured and computational or numerical statistical techniques. Quantitative data is the data collection technique of questionnaires, interviews, and observation. Research in the form of mathematics and data that can be calculated is also called quantitative research. This quantitative research method is obtained through questionnaires as a tool measured during research, which usually uses questionnaires. According to Nasir, quantitative research is a method that uses the history of philosophy, which has positive aspects for researching certain samples and populations. ChatGPT can improve students' reading skills by providing a variety of reading sources, helping to improve reading comprehension and writing skills, and increasing learning motivation. Therefore, using ChatGPT in education can be an alternative for improving the quality of learning in the Education 5.0 era. This quantitative research method is also divided into two, namely inferential methods and descriptive methods. One example of quantitative research is using ChatGPT for education in the Education 5.0 Era to improve reading skills and student learning.

**Table 1.** ChatGPT statements regarding the benefits, objectives and functions

| No | Statement | Data validity |
|---|---|---|
| 1 | Utilizing the use of ChatGPT for education can encourage students' curiosity | 0 – 60 |
| 2 | The ChatGPT application is an application that is easy to access and practical | 0 – 50 |
| 3 | The material in ChatGPT is very interesting and easy for students to understand | 0 – 50 |
| 4 | The material contained in the ChatGPT application can make students creative | 0 – 42 |
| 5 | The material contained in the ChatGPT application is very suitable for the learning style of students who like reading scientific works | 0 – 40 |
| 6 | Utilizing the use of ChatGPT online makes students more innovative | 0 – 45 |
| 7 | ChatGPT is fun learning and helps increase students' interest in reading | 0 – 42 |
| 8 | Using ChatGPT can increase curiosity and dare to express opinions without putting others down | 0 – 65 |
| 9 | Using ChatGPT can train students to explain the answers they give | 0 – 42 |
| 10 | The research example on the ChatGPT application is very clear | 0 – 60 |
| 11 | The answers provided by ChatGPT are very accurate and reliable | 0 – 50 |
| 12 | The material used in using ChatGPT is in accordance with the lessons taught | 0 – 50 |
| 13 | The ChatGPT application is a means to make learning easier for students | 0 – 45 |
| 14 | The ChatGPT application is so practical that it has become a technology tool that is popular with many students | 0 – 50 |
| 15 | The ChatGPT application is really needed by students, especially for students' reading skills | 0 – 60 |

The table above contains statements from several ChatGPT questions that school researchers researched. His statement resulting from several questions in ChatGPT helped researchers research the use of ChatGPT in the Education 5.0 Era in improving students' reading skills. The questions tested in this research were 15 questions containing ChatGPT statements regarding the benefits, objectives and functions of using the ChatGPT application for students. The statement containing the benefits of using ChatGPT received a percentage of 60%, with the category strongly agreeing. The statement contains that the ChatGPT application is an easy, practical and interesting application with a percentage gain of 50% with the category strongly agree. This research also examines how the use of ChatGPT in the Education Era 5.0 can make students think more innovatively by obtaining a strongly agree category with a percentage of 50%.

The statement in the ChatGPT application states that using the ChatGPT application can respect other people's opinions with a percentage of 65%, and the category is strongly agree. The statements in this research show that the example of the ChatGPT learning media is very clear by obtaining the strongly agree category so that the percentage

gain is 45%. The question stated his statement that ChatGPT media could facilitate learning, which obtained a percentage result of 45%, with the category strongly agreeing. Likewise, other statements which also received the strongly agree category. The table above shows that the ChatGPT application is very popular with students, so it received the highest category of strongly agree with a percentage of 65% and obtained the category of strongly agree with the lowest percentage of 40%. Research using ChatGPT can make it easier for students to learn to read at home and school.



Figure 2. Image of ChatGPT form
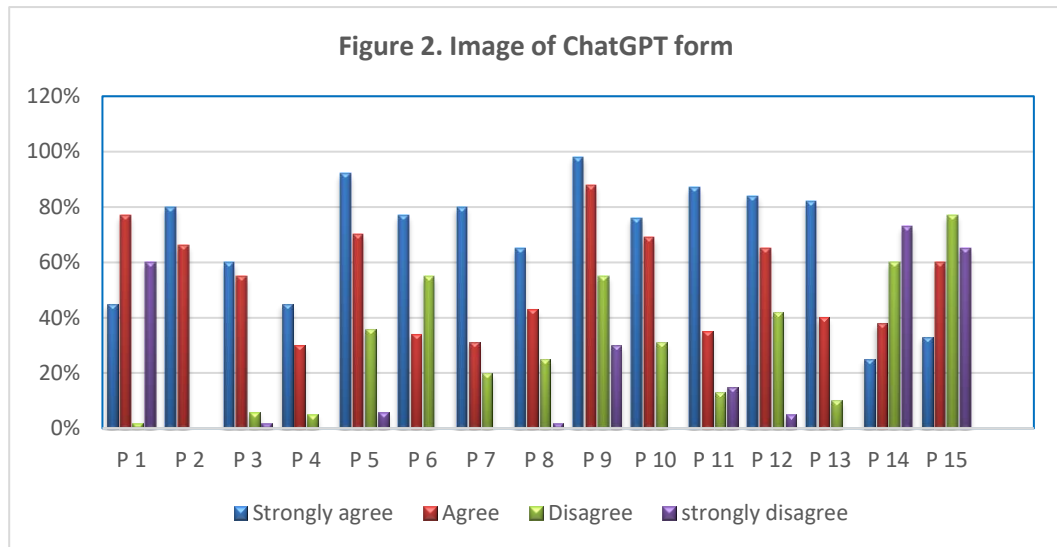
In the image above, there is a graph from ChatGPT. The data from testing questions on ChatGPT is as follows: 30 students are the objects of this research. Researchers used 15 questions to test students' ability to answer ChatGPT questions in the research process. The highest research results were that students obtained a percentage of 80%. The category of strongly agree (SS) was obtained based on the research results. The second highest percentage of research results obtained was a percentage of 60%, with the category strongly agree (SS). In the third highest research result, a percentage of 45% was obtained, with the category strongly agree. The lowest ChatGPT research results were obtained by the category of strongly disagree with a percentage of 0%. In the ChatGPT application research results, the second lowest was obtained by the strongly disagree category with a percentage of 5%. This shows that the category strongly agrees as the highest category.

Data from the research test results of the ChatGPT application on students in the Education Era 5.0 can be explained as follows: in the strongly agree category there was the highest percentage gain of 92%, this strongly agree category was the highest percentage gain of several existing categories. Meanwhile, the lowest percentage obtained in the strongly agree category 69%. The second percentage obtained was in the agree category with the highest percentage obtained at 52%, while the lowest percentage obtained in the agree category obtained a percentage of 30%. In the disagree category, the highest percentage was 15%, while the lowest level percentage was 6%. The next category obtained was the strongly disagree category, which received the highest percentage of 5%, while the lowest percentage was 0%. Based on the overall results of this research, students who strongly agreed with the questions in ChatGPT obtained the highest percentage of 92%. Meanwhile, students who

didn't like questions on ChatGPT got a percentage of 5%.

**Figure 3. Using ChatGPT for Reading Skill Teaching**
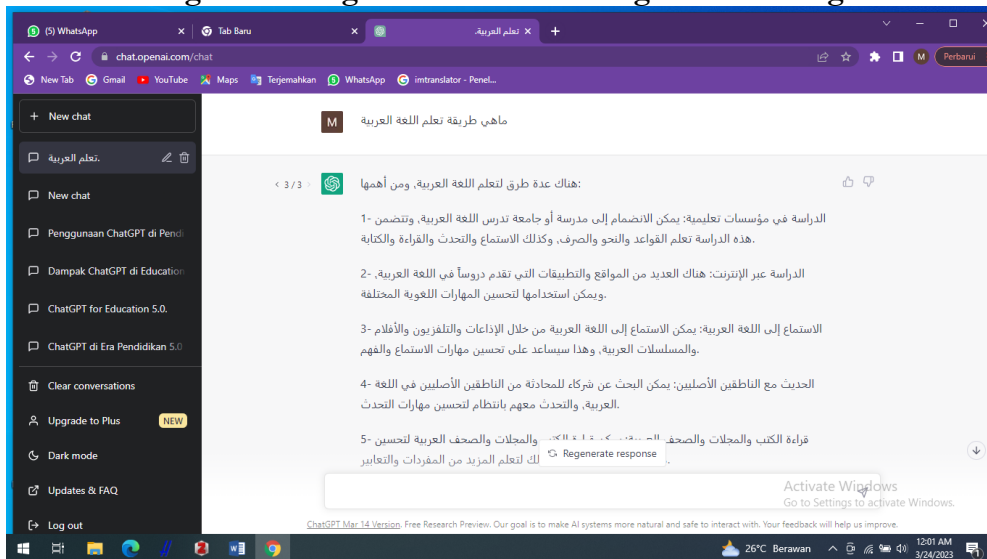


In the picture above, ChatGPT is used for education in Era Education 5.0. The form of ChatGPT is in the form of questions related to education, especially education science. This is in the form of answers given on the student's android and is easy to carry anywhere. Questions are usually aimed at students during the teaching and learning process. This ChatGPT application greatly influences students, especially student educators in improving reading, education in the Education Era 5.0 and others. The ChatGPT application can make it easier for students to access some questions from lessons learned. The ChatGPT application also helps educators because educators do not need to manually create questions that will be tested on paper. However, teachers or lecturers can type any questions that will be tested on students on ChatGPT media so that it can make it easier to access learning at school.

The characteristics of this learning media are that the material on ChatGPT is presented clearly, answers to questions according to specific questions, the purpose of using ChatGPT is clear, instructions for using the media are clear and the flow of learning is clear. Currently, the use of ChatGPT is very necessary, because students and students now often use the internet instead of answering questions on paper manually, by using a cellphone students will find it easier to find answers to their exams so this will be more helpful, especially for teachers or lecturers with the ChatGPT application . Using ChatGPT has its own appeal for students. The positive impact is that it makes it easier for students to access learning in reading and be able to answer exams according to current developments in the modern era. Therefore, students must be able to use ChatGPT properly and correctly. So that students can improve their reading skills, especially at school.

This research results in using ChatGPT for education in the Education 5.0 Era to improve reading skills and learning. ChatGPT is used to facilitate students' reading skills and abilities in the learning process. Using ChatGPT can also make it easier for teachers to test students' abilities in understanding the lessons they have learned. ChatGPT is very suitable

for students, especially for improving their reading skills. The advantage of ChatGPT is that it is easy to answer all the questions given; more importantly, this application is very practical and can be accessed via cellphone. ChatGPT is very influential on students, because initially students are not enthusiastic about reading exam questions. The ChatGPT application can increase students' enthusiasm for reading for learning. This learning media is very interesting for students. ChatGPT can improve students' reading skills. The explanations given are very clear and easy to understand.

Research examining the use of ChatGPT for education shows that many students like learning using ChatGPT. The method used in the research is quantitative, using numbers or numbers containing numbers in it or in a study. This quantitative research method is obtained by collecting all the large amounts of data obtained by researchers by going into the field. When directly at the research location, the aim is to find research data that comes from the source and is valid and true. Using quantitative methods that contain original data from the research carried out, researchers can explain in detail how much data has been researched in the field. This method also makes it easier for researchers to create scientific work by using tables, bar charts, pie charts, line charts in scientific work by using data that knows the source and conditions based on what is available at the place of research.

This research aims to make the teaching and learning easier for teachers and students. Some schools already use ChatGPT in the Education 5.0 era, but a small number of schools use regular or manual methods to test students' abilities. Schools that do not use ChatGPT are usually schools in rural areas that advanced technological tools have not yet explored, while schools that have used ChatGPT are usually schools whose areas have developed modern and sophisticated technological tools in the Education 5.0 Era in improving students' reading skills during the learning process. This can make it easier for teachers to provide the material. So it is hoped that the government can provide good feature facilities for schools that have not yet implemented ChatGPT. So the researcher hopes that future researchers will be able to help schools and those who cannot yet use ChatGPT in education so they can use this media easily in line with current developments.

## Conclusion

Based on the research discussion above, it can be concluded that the use of ChatGPT for education in the Era of Education 5.0 in improving reading skills can be a reference for students to make it easier for teachers and students to test their learning process, which has been carried out through testing in online ChatGPT. The results of research that examined 30 students is that there is a graph that explains how many percent of students agree, strongly agree, disagree, and strongly disagree with the use of ChatGPT for education in the Education Era 5.0. Research on students has tested a table containing statements about the questions asked. So, based on the results of this research, it show that the achievement of using ChatGPT for students, namely 80%, is included in the category suitable for use as a learning media that can help students understand and increase their reading motivation.

This research highlights the innovative use of ChatGPT as a valuable educational tool in the context of Education 5.0. The study showcases how ChatGPT, in the form of a mobile application, not only enhances students' reading skills and

learning but also simplifies educators' teaching and assessment processes. By leveraging quantitative research methods, the study provides valuable insights into the effectiveness and widespread adoption of ChatGPT in educational settings. Furthermore, it underscores the importance of ensuring equitable access to such technological tools, especially in less developed areas, to bridge the digital divide in education. This research contributes to the growing body of knowledge on integrating AI-driven applications like ChatGPT in modern education, emphasizing its potential to improve student engagement and pedagogical efficiency in the era of Education 5.0.

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