

Opportunities and Challenges of Using ChatGPT for the Affective Development of Students

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Abstract:

This study aims to determine the opportunities and challenges of ChatGPT in the world of education and to find out also the advantages and disadvantages of ChatGPT in the world of education, especially regarding the affective realm consisting of spiritual, moral and ethical values. This research is a research that uses a descriptive qualitative approach, which describes a phenomenon by collecting data, in this case the use and utilization of ChatGPT. In the use of ChatGPT quite affecting the affective of students, among them from the spiritual and moral side tend to be ignored. Honesty is overlooked when students use ChatGPT, they don't care about the spiritual consequences, all students need is good and satisfactory grades without caring about the highly immoral process. This phenomenon is bad news that is quite sad in the world of education. The strategy of instilling values by instilling spiritual and moral values for students is necessary in looking at ChatGPT. strategies to prevent the impact of ChatGPT's shortcomings. An educator must be firm in supervising his students, a firm policy needs to be emphasized on students as well. One way that can be done is that academics warn that the use of ChatGPT can be done as long as it is balanced with binding regulatory regulations.

Keywords: Chatgpt, Affective, Artificial Intelligence

Introduction

Along with the times, learning media has changed a lot. Technological advances have changed learning from the convergent to the conventional. The reforms seem to realize that learning resources are not only focused on teachers. The advancement of the digital era is also part of technological developments. Digitalization can be said to be a lifestyle characterized by substantial magnitude of transformation and no size. The use of digital technology in learning is needed so that students are interested in following the teaching and learning process. Currently the emergence of artificial intelligence or AI (Artificial intelligence). Improving learning experience and ability, improving academic performance, and providing personalized support are important aspects that artificial intelligence must have. Eventually higher education institutions around the world are considering adopting AI-enabled stationery, for automated grading, examination technology and for learning. This is in line with the use of ChatGPT which is currently a phenomenon that is quite widely discussed. Chat Generative Pre-trained Transformer or abbreviated as ChatGPT is basically a chatbot that has extraordinary capabilities, ChatGPT appears to be an AI-based chatbot and has a high enough influence on the world of education. This chatbot utilizes Natural Language Processing (NLP) so that the responses generated are very relevant and contextually relevant to respond to requests from humans. ChatGPT is promising enough for the world of education to develop a sophisticated

education system and supported by AI. In addition, a smart approach in introducing this technology in the world of education needs to be underlined because in its use ChatGPT must be done carefully because many risks await if users misinterpret this technology. So a careful evaluation is needed to deal with the high interest of students in the use of ChatGPT so that efforts can be made to prevent potential risks. However, behind the popularity and application of ChatGPT in the world of education, previous researchers have also expressed concern about the use of ChatGPT, especially in terms of ethics and its use. Actually, the emergence of ChatGPT has been debated about its implications because ChatGPT has a negative impact on students' higher-order thinking skills and scientific integrity. BestColleges, USA conducted a survey study that examined students' concerns and views on the use of ChatGPT. The results of this study showed that half of the students stated that using ChatGPT to complete assignments and find answers was an act of cheating but on the contrary, 20% of students opposed this statement, while the remaining 30% expressed disapproval. The survey also revealed that 43% have used AI and are experienced enough to operate it and half admitted to using ChatGPT for their assignments and exams. In short, about 1 in 5 college students use ChatGPT to complete assignments and find answers on exams. The performance produced by ChatGPT is extraordinary, including answering questions through chatbots, producing good essay writing in connected or interconnected language. Although there are many uses offered by ChatGPT, the fear of impact is very large and becomes a challenge. The main fear is that the ChatGPT system is feared to dominate the world of education, besides that the AI system in this case ChatGPT has the potential to be manipulated or damaged so that it will become its own boomerang for its users. In a literature review conducted by Io (2023) stated that ChatGPT's performance varies depending on the domain of scientific fields such as in economics has quite satisfactory results but in the field of mathematics the results are not so satisfactory. The problems arising from the use of ChatGPT also vary including ethical issues, copyright, legal issues and transparency. Plagiarism, loss of originality, spread of hoaxes (false information), limited knowledge, vulnerable cybersecurity and content that encourages false educational narratives are also serious problems with ChatGPT. Therefore, the presence of ChatGPT is a challenge in itself, especially related to student affectiveness, namely ethics, spiritual and social students. So it can be known that the use and utilization of ChatGPT in the world of education has not been used properly because most students use ChatGPT to get answers instantly without the need to think hard, look for literature or even ask lecturers. Thus leading to a person's potential over-reliance on AI. On the other hand, the presence of ChatGPT must be addressed firmly and wisely even though all the conveniences can be provided by ChatGPT, ChatGPT users, especially students, must be equipped with the right spiritual and moral understanding to avoid a wrong understanding of the use of ChatGPT so that ChatGPT users are not complacent and lulled so as not to let critical abilities slowly disappear due to the convenience provided by the features in ChatGPT. Based on this phenomenon, researchers are interested in examining what are the opportunities and challenges of using ChatGPT in education and how the impact of using ChatGPT in terms of affective students. This study aims to determine the opportunities and threats of using ChatGPT in the world of Education and to find out also the advantages and disadvantages of using ChatGPT in the world of Education, especially those related to student affectiveness which includes spiritual, moral, and ethical values. This study also aims to examine strategies that need to be done to overcome and prevent the impact of threats and disadvantages of using ChatGPT in the world of Education.

Research Method

This research is a research that uses a descriptive qualitative approach, which describes a phenomenon by collecting data, in this case it is the use and utilization of ChatGPT. In its implementation, a descriptive qualitative approach uses data collection methods and non-quantitative analysis methods. Data sources are subjects that explain where the data is obtained from data sources are the main thing in a study because data sources are a benchmark for how strong the data obtained. Researchers used primary and secondary data sources in this study. Researchers obtain primary data through literature studies that discuss the phenomenon of the phenomenon of ChatGPT use by students or students, while for secondary data researchers conduct literature studies, namely by reading scientific journals and previous research. In this study, data analysis was carried out by linking relevant theories and related ChatGPT technology.

Result and Discussion

1. ChatGPT Opportunities in Education

ChatGPT can be categorized as an interactive system where chatGPT users can allow conversations delivered using natural language. Open AI (the organization that developed ChatGPT) suggests that the conversation format available in ChatGPT can be used to answer questions, revise something wrong, oppose distorted conclusions and not respond if the request submitted is inappropriate (Open AI 2022). Chatbot systems like ChatGPT are nothing new. Humans can interact with computers fluently using natural language has existed since the beginning of the emergence of AI (Artificial Intelligence) technology. Chatbot technology, whose existence and use is increasingly widespread, raises the question of why ChatGPT managed to get such a high level of attention from the beginning of its launch, which is November 2022. (4) High quality of results is the answer to the question. Interaction of various topics can be done by ChatGPT, content with good accuracy and answers generated in quality language are amazing capabilities that ChatGPT is capable of. Through interactions carried out through ChatGPT, it seems to bring someone to dialogue with someone who is educated and an expert in various fields of study. ChatGPT being a well-known chatbot cannot be separated from the questions of ChatGPT users in the world of education and its impact on student affectiveness, must be evaluated from a spiritual and social perspective. The evaluation can at least be a reference to the real consequences of using technology. The abilities possessed by ChatGPT are believed to be quite influential in their use and application in terms of spiritual and social students. In a more general context, the benefits of ChatGPT are likened to a medium to provide additional intelligence that can improve operations. The emergence of ChatGPT in the world of education provides many new opportunities that can support the development of education to be advanced and modern by utilizing AI (Artificial intelligence) technology. ChatGPT successfully launched their latest version, the GPT-4 version, the latest version of ChatGPT has been developed and processed in such a way as to be able to process data so that it can produce data derived from various inputs. GPT-4 has the ability to produce a variety of satisfactory answers from a variety of questions given, this is the real result of the ability of this application to master in detail the patterns and structures of language algorithms contained in computers which are in the form of text so that users can get responses or answers that suit our wishes, even the data produced is quite accurate and in accordance with user expectations. So that the output produced in such a way makes

students easily answer questions so long, clearly and meaningfully, but not from students' thinking skills but from the results of artificial intelligence in this case using ChatGPT. Based on an interview Marrone (2022) conducted with one of the students in Australia about how their experience while using AI technology. Marrone said that students who use AI have higher thinking and they implement the use of AI into their daily lives. Marrone expressed his opinion to allow students to operate AI to support education. According to Marrone et al (2022), AI makes it easier for students to develop creativity, they are encouraged to think independently so that it can be an opportunity for students to develop creativity. Stevson et al in their research comparing the performance of ChatGPT 4 with the previous generation of ChatGPT, found that humans are superior to ChatGPT 4 in producing original creativity. Although the original version of ChatGPT has powerful capabilities, humans have higher original creativity when compared to ChatGPT 4. But the performance produced by ChatGPT 4 in many phenomena today looks like the result of human thinking. ChatGPT can be used as an effective cooperation between humans and machines. ChatGPT can be used for intelligent analogies, by leveraging ChatGPT's ability to process natural language, the diverse capabilities and resources of the ChatGPT engine. These abilities are used to process language. ChatGPT's performance and capabilities are important because new ChatGPT models and updates can evolve over time. The opportunities generated by ChatGPT in the world of education are quite large, including ChatGPT being able to personalize learning by adjusting to the appropriate learning materials and methods. Direct interaction between students and ChatGPT can get answers to questions, get detailed explanations and students can get feedback obtained instantly. Educational accessibility can be developed and intended for users who experience physical or geographical limitations. Through ChatGPT, physical presence and distance are not at issue. ChatGPT is a new solution and alternative that is more affordable in the world of education replacing the classical education system that still uses textbooks or personal teachers. Problem solving and working on any difficult task can be solved through ChatGPT. In addition to answering questions asked by students, ChatGPT is able to show step by step to solve complex problems related to student assignments, so that students can improve their ability to solve problems that are done independently as well as detailed and deep understanding obtained by students.

2. ChatGPT Threats for Student Affective

ChatGPT in the academic field is widely used to answer questions easily, but behind its ease and intelligence offered there are many concerns that arise. A common concern that occurs is the dependence of students on AI technology which is feared to inhibit students' thinking creativity and make students not independent in solving problems, ChatGPT is even used by students as virtual assistants for them. Therefore, the emergence of ChatGPT is a challenge and threat to the world of education, one of which is from a spiritual and moral point of view. Spiritual and moral policies must be prepared by the world of education as a result of using ChatGPT. This is intended so that students do not fall into actions or actions that violate the world of education, one of which is plagiarism. Certain stakeholders or parties must prepare policies designed in relation to the use of ChatGPT to reduce or prevent immoral and unfounded actions in the world of education. Educators' understanding of technological developments must also be emphasized so that educators are able to deal with students who are indicated to abuse technology including ChatGPT. In addition, educators need to be socialized on how an educator responds to the use of ChatGPT wisely so as not to fall into or be complacent in the use of ChatGPT which is unethical and not

based on spiritual values. In its use, ChatGPT should be used as a medium to add, complement and enrich the material, not even used as the main reference. An educator has a considerable role in the spiritual and moral strengthening of students, because if students do not have spiritual and moral beliefs instilled in themselves, it will be very easy for them to be complacent and fall into very harmful things. In the use of ChatGPT from a spiritual and moral point of view tends to be ignored. Honesty is overlooked when students use ChatGPT, they don't care about the spiritual consequences, all students need is good and satisfactory grades without caring about the highly immoral process. This phenomenon is bad news that is quite sad in the world of education. The strategy of instilling values by instilling spiritual and moral values for students is necessary in looking at ChatGPT. With the cultivation of spiritual and moral values, it is hoped that students can fortify themselves and always remember the risks that must be borne if the use of ChatGPT is intended for worldly interests only, so it is hoped that if spiritual and moral values are embedded in students will change their views on ChatGPT, the output produced is that students use ChatGPT as a learning support and as a form of utilizing technology correctly, Not as a medium to get answers instantly without the need to think hard. In addition, honesty is the main thing that must be embedded in students. Honesty can be formed by instilling spiritual values in students, so it is expected that educators and parents always instill spiritual values in students. Educators can provide socialization and reinforcement to students by providing explanations regarding the effects caused if someone violates moral and ethical values in the academic world. For example, if you do the final project with the help of ChatGPT, not purely from the results of your own thoughts and ideas, the degree that has been achieved will be revoked and get a maximum prison sentence of 2 years or a fine of 200 million as stated in article 25 paragraph 2 of the National Education Law and Article 70 of the National Education Law. Since ChatGPT was first launched in November 2022, there has been a social impact resulting from ChatGPT. One of the things that has an impact is the dependence on technology that increasingly makes humans lazy to think at a high level, even the smallest problems sometimes depend on the intelligence produced by ChatGPT. A common fear is that students and researchers will switch to choosing ChatGPT to rely on ChatGPT to complete essays. If the essay becomes a reference in the assessment, it will be a concern by professors and lecturers. The assessment system will be damaged if in the process of utilizing ChatGPT technology, there is no longer a pure result of creative thinking, there are also no bright ideas from humans as a result of using ChatGPT. Social values and academic principles began to be abandoned, since the presence of ChatGPT. The International Center for Academic Integrity (2021) believes that academic integrity has six fundamental values that are committed to including responsibility, honesty, courage, respect, trust and justice. Therefore, if an essay work or written text is produced from ChatGPT intelligence and the work is claimed to be a personal work of an original nature, it can be said that the act violates social values and the core principles of academic integrity. The use of ChatGPT which is free and its ease of access for users is a strong attraction for students to take advantage of this chatbot. User-asked questions can be changed to reflect the differences and accuracy of answers generated by ChatGPT. This is an opportunity for students to produce essays and choose which one they think is best. This phenomenon is a concern because of the unavailability of features to find out who uses the services of this chatbot to complete their essays, so that students feel free and safe without fear of being known to operate ChatGPT. It is important for the world of education to ponder whether the use of ChatGPT to complete essays

or papers constitutes an act of plagiarism which is morally and socially an act of stealing intellectual property.(17)

3. Strengths and Weakness of ChatGPT in Education Related to Student Affectiveness

The use of ChatGPT when used wisely actually has promising advantages such as being able to produce writing that is very similar to man-made, shortening the time to make writing, and providing responsive and accurate solutions in certain situations. Several languages can be used in operating ChatGPT, but over time it is expected that ChatGPT can be used for more languages. This is because more people around the world can take advantage of ChatGPT's intelligence, which includes several aspects including style, tone, culture, which are quite difficult to translate accurately. According to policy analysts and researchers, ChatGPT can be adopted to develop and improve learning in several ways. Personalized tutoring and supportive learning is one of the advantages of the ChatGPT application that is quite promising. ChatGPT is able to analyze student performance data and provide appropriate responses to guidelines aimed at improving students' knowledge and skills. ChatGPT is also an alternative for the world of education to create an interactive and interesting learning atmosphere. Automatic assessment is also capable of being carried out by ChatGPT's intelligence. Judging from its time efficiency, ChatGPT is quite efficient and saves time compared to using ordinary methods. So that it can focus more on all aspects such as curriculum design, student assignments and student engagement. Virtual office hours are also available in ChatGPT so that students can easily access and interact with ChatGPT instructors outside of learning hours. ChatGPT has the potential to be the latest revolution in knowledge by making it easy to access and analyze large amounts of information. ChatGPT is even capable of processing unstructured data including academic journals as well as research paper assignments. Relevant information and insights can also be provided by ChatGPT in the form of conversations, making it easier for researchers and academics to identify patterns and relationships that might otherwise be missed if using traditional data analysis techniques. In general, ChatGPT is quite related to student affectiveness. Students can assess whether ChatGPT is efficient enough to help them solve problems. Of course, the answers that ChatGPT gives to respond to questions from students are not entirely in line with the students' own ideas, so when utilizing ChatGPT intelligence students must be able to sort and choose whether the answers given are relevant enough to the questions asked. Students must be able to realize the difference between purely human thinking and ideas generated by artificial intelligence, so that the possibilities that occur as a result of using ChatGPT can be realized by students. In short, the use of ChatGPT in students must be balanced with the awareness of each student that ChatGPT is the result of technological advances in the form of artificial intelligence in the use of which students must be able to assess and accept differences from various ideas, so that with this awareness does not make ChatGPT a place to depend on completing student assignments, ChatGPT is just a medium that becomes a means to facilitate students in learning activities so that the presence of ChatGPT also becomes a means to shape students' personalities to be better spiritually as well as in terms of ethics and morals. Spiritual and moral are an important part of students' affectiveness and become a mandatory thing to develop. In the world of spiritual and moral education, it is often only emphasized on the attitude of students, even though there are many phenomena in the academic

world that are directly related to spiritual and moral values. For example, in learning activities and assignments, sometimes students only think about how they can complete these tasks in an easy way without having to think hard. So ChatGPT is the right answer for students who have such principles. Everything that is taken in a fast and instant way certainly has hidden risks behind it as is the case with ChatGPT. ChatGPT is a chatbot as a result of Artificial Intelligence (AI) certainly has a fairly high security risk. LLM cyberattacks are one of the threats that raise concerns that can potentially be misused and are a socially dangerous activity. Although ChatGPT has claimed to have implemented cybersecurity, it is possible that ChatGPT abuse occurs to be used to generate URLs, references, even code libraries, and functions that do not actually exist. Easy solutions are not found to minimize the risk of crime arising from the application of AI, this is a statement from Goldstein, Sastry, Musser, DiResta, Gentzel and Sedova (2023). So there must be preventive efforts to minimize cybersecurity crimes. In education, ChatGPT is more often used by students. The level of knowledge of students about cybersecurity is a risk that must be borne if things happen that are not desirable. Therefore, assistance and explanation from an educator is very important for students. Operating ChatGPT that is not equipped with sufficient knowledge is very risky not only attacking cybersecurity but also attacking students personally from an affective point of view that includes spiritual and moral values. Strict boundaries must be applied to students, lest ChatGPT intelligence master student thinking patterns. So strategies are needed as an effort to prevent the impact of this ChatGPT deficiency. An educator must be firm in supervising his students, a firm policy needs to be emphasized on students as well. One way that can be done is that academics warn that the use of ChatGPT can be done as long as it is balanced with binding regulatory regulations. Among them, ChatGPT is used as a medium to make it easier for students to get answer references, not even used as a source of answers. That way students can utilize ChatGPT wisely. The results of student paper and essay assignments may be based on references from ChatGPT but need to be redeveloped by students. Thus students can still think critically and creatively using ideas that are purely from their own thinking

Conclusion

ChatGPT is the result of artificial intelligence created by Open AI, it offers many conveniences for its users including helping answer questions, making essays and providing step-by-step explanations to students. But behind the advantages provided there are problems arising from the use of chatGPT also vary including ethical issues, copyright, legal issues and transparency. Viewed from the affective side of ChatGPT quite affecting the affective of students, the use of ChatGPT that is not done wisely will endanger users including dependence on artificial intelligence, namely ChatGPT. In addition, there is dishonesty of students in doing exams and assignments. So strategies are needed to prevent and deal with the impacts caused by ChatGPT.

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