

Can Chat GPT Replace the Role of the Teacher in the Classroom: A Fundamental Analysis

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Abstract

The background of this study relates to an exploration of the role of technology in the classroom learning process, especially in terms of shifting the role of the teacher as the main instructor. The rapid and ever-changing development of technology has had a huge impact on education systems around the world, such as ChatGPT. This study will conduct an in-depth analysis of ChatGPT's ability to replace the role of teachers in the classroom learning process. This research is qualitative in nature. The methodology used to collect data includes attentive listening and careful documentation of relevant information, which is then subjected to analytical procedures such as data reduction, data display, and conclusion drawing. The study arrived at the conclusion that in the context of using ChatGPT in learning, it should be noted that technology can only be a tool and cannot replace the role of the teacher entirely. Therefore, it is necessary to integrate technology in learning in an appropriate and effective way and develop competence for teachers in managing learning with technology.

Keywords: ChatGPT, Teacher, Classroom

Abstrak

Latar belakang studi ini berkaitan dengan suatu eksplorasi peran teknologi dalam proses pembelajaran di ruang kelas, khususnya dalam hal menggeser peran guru sebagai pengajar utama. Perkembangan teknologi yang semakin pesat dan terus berubah membawa pengaruh besar terhadap sistem pendidikan di seluruh dunia, seperti ChatGPT. Penelitian ini akan dilakukan analisis mendalam tentang kemampuan ChatGPT dalam menggantikan peran guru dalam proses pembelajaran di ruang kelas. Penelitian ini bersifat kualitatif. Metodologi yang digunakan untuk mengumpulkan data meliputi pendengaran yang penuh perhatian dan dokumentasi yang cermat atas informasi yang relevan, yang kemudian menjadi sasaran prosedur analisis seperti reduksi data, tampilan data, dan penarikan kesimpulan. Studi ini tiba pada kesimpulan bahwa dalam konteks penggunaan ChatGPT dalam pembelajaran, perlu diperhatikan bahwa teknologi hanya dapat menjadi alat bantu dan tidak dapat menggantikan peran guru secara keseluruhan. Oleh karena itu, perlu adanya integrasi teknologi dalam pembelajaran dengan cara yang tepat dan efektif serta pengembangan kompetensi bagi guru dalam mengelola pembelajaran dengan teknologi.

Kata Kunci: ChatGPT, Guru, Ruang Kelas

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INTRODUCTION

The research title "Can ChatGPT Shift the Role of Teachers in the Classroom: A Fundamental Analysis" indicates a desire to explore the role of technology in the classroom learning process, especially in terms of shifting the role of the teacher as the main instructor. The rapid and ever-changing development of technology has had a huge impact on education systems around the world (Ausat, 2023); (Kraugusteeliana et al., 2022) and (Harahap, Sutrisno, et al., 2023). Technologies such

as ChatGPT, an artificial intelligence system that can respond to user input, have changed the way people interact with machines and opened up new potential in teaching and learning (Ausat et al., 2023) and (Fauzi et al., 2023).

However, the changes in teaching brought about by technological advances have raised important questions about the role of teachers in the learning process. Can technologies such as ChatGPT replace the role of the teacher as the primary educator in the classroom? Are teachers still needed in the learning process if these technologies can provide equally effective responses?

In the current study, an in-depth analysis of ChatGPT's ability to replace the teacher's role in the classroom learning process will be conducted. The research will explore how ChatGPT can facilitate learning and how the teacher's role can be integrated with the technology to achieve optimal results. This research is important as it will provide insight into the role of technology in the learning process and how it can be used effectively to improve learning outcomes. It can also provide guidance for the development of new technologies that can facilitate learning in the future.

METHOD

This research utilises a literature review methodology, where the researcher does not conduct primary data collection through direct field research. The researcher used a variety of reference sources to ensure a smooth execution of the research. The literature for this study was obtained from digital media and scientific repositories using keywords related to the themes discussed, namely ChatGPT and the role of teachers. The methodology used by the authors was flexible, allowing for the selection of relevant reference sources without imposing restrictions on specific journals or digital platforms. Our arguments are supported by multiple sources, such as the Emerald Insight journal portal, ResearchGate, and Elsevier. The main theme of this scientific article deals with the presence of ChatGPT can replace the role of the teacher in the classroom? The authors' use of keyword emphasis served to limit the parameters of the discourse and promote logical consistency. The researcher's investigation centred on academic journals, articles, and publications that have been published from 2022 to date. During the search process, we used keywords to conduct searches across multiple publishing platforms. It is important to recognise that only papers, journals and publications were considered highly relevant to the subject matter of ChatGPT and its relation to the role of teachers in school classrooms, while others were deemed irrelevant. This academic article consists of a total of 18 comprehensive sources.

The ongoing examination was classified as a form of qualitative research. The data collection process involves the application of various methodologies, such as active listening and thorough documentation of pertinent details. The aforementioned methods were utilised to facilitate the examination of the data, which was conducted through a process of data reduction, data presentation and conclusion drawing. The main purpose of this analysis was to gain a comprehensive understanding of the literature review conducted as part of this research project. During the data

reduction phase, the collected data was systematically organised, categorised and eliminated to facilitate the generation of significant findings and simplify the process of drawing conclusions. The need to analyse the data during the reduction phase was due to the complex and multifaceted nature of the data. The reduction phase was conducted to determine the relevance of the information to the end goal. Initially, a total of 28 sources were obtained. After the initial procedure, the numerical value was modified to 18. Furthermore, the data will be presented through graphical illustrations. The current stage is the next progression in the data reduction process, where the data set is methodically organised in a structured manner to enhance understanding and simplify conclusion drawing. The mode of data representation used in this particular context is written discourse, specifically in the form of field notes. The efficiency of organising and arranging data in relational patterns can be enhanced by utilising this method of data presentation. The final step of the procedure is the drawing of conclusions based on the collected data. The current phase shows the conclusion of the methodology we used for qualitative data analysis, where we checked the results of data reduction and data presentation to ensure consistency with the intended purpose of the analysis. The purpose of this stage is to derive meaning from the collected data by detecting correlations, similarities, or dissimilarities, in order to design solutions to pre-existing problems. The sources used are considered reliable to derive conclusions. The purpose of this endeavour is to obtain reliable and precise findings, thus facilitating understanding.

RESULTS AND DISCUSSION

The question of whether ChatGPT can replace teachers in the classroom is an interesting and complex one. It relates to the influence of technology and artificial intelligence on education. In this explanation, we will discuss some important aspects related to the question. First of all, it should be noted that the role of the teacher in the classroom is very important and cannot be completely replaced by technology. A teacher is a person who has the ability to effectively deliver instruction and guide students in their learning process (Tuhuteru et al., 2023); (Rukman et al., 2023); (Harahap, Suherlan, et al., 2023); (Manafe et al., 2023); (Raharjo et al., 2023) and (Prastyaningtyas et al., 2023). In addition, teachers also have the role of mentors and role models for students (Zen et al., 2023). However, the presence of ChatGPT can make an important contribution in the classroom. ChatGPT is an artificial intelligence technology that is capable of processing and generating text in a very sophisticated way (Kraugusteeliana et al., 2023). In the context of education, ChatGPT can be used to assist students in learning and make teachers' tasks easier.

One of the ways ChatGPT can assist in learning is by providing relevant and high-quality reading materials for students (Kasneci et al., 2023). With the ability to process natural language, ChatGPT can produce texts with language that is easy to understand and appropriate for students' level of understanding. Teachers can utilise ChatGPT to create high quality reading materials that meet students' needs. In addition, ChatGPT can also be used to automatically create questions and

tests. With the ability to understand natural language and generate text, ChatGPT can create differentiated questions and tests that match the students' level of understanding (Cooper, 2023). This will make it easier for teachers to create relevant questions and tests and save time. However, while ChatGPT has the potential to assist learning, there are some limitations that need to be considered. Firstly, ChatGPT can only generate text and cannot provide live explanations or examples as teachers can. Secondly, ChatGPT can only work with existing data and cannot provide a more in-depth assessment of students' abilities.

Therefore, in the context of education, ChatGPT can be used as a tool in the learning process and not a substitute for the role of the teacher. Although ChatGPT can make an important contribution in simplifying the teacher's task, it still requires the presence of the teacher as a person who provides guidance, guidance, and a more in-depth assessment of students' abilities. In essence, the use of ChatGPT in the classroom can make an important contribution in simplifying the teacher's task and assisting students in learning (Haleem et al., 2022). However, the role of teachers as mentors and role models still cannot be fully replaced by technology. Therefore, ChatGPT can be used as an auxiliary tool in the learning process and not as a substitute for the teacher's role. In addition, there needs to be an effort to integrate technology in learning in an appropriate way and in accordance with the educational context.

The integration of technology in learning can be done by considering several important aspects, such as identifying the problem to be solved, choosing technology that suits the learning objectives, and developing strategies for effective use of technology (Ausat et al., 2023). In addition, it is also necessary to consider other aspects such as the availability of adequate infrastructure and human resources to manage technology in learning (Kamar et al., 2022). In integrating technology in learning, the role of teachers is also very important. Teachers need to have sufficient understanding of the technology used and be able to utilise it well in the learning process (Ausat, 2022). In addition, teachers also need to develop new skills and competences in managing learning with technology.

In the context of using ChatGPT, teachers need to have the ability to identify and select relevant texts for learning and be able to develop effective strategies for using ChatGPT. In addition, teachers also need to have the ability to evaluate and provide accurate assessment of students' abilities. In this case, there is a need for training and competency development for teachers in managing learning with technology, including the use of ChatGPT. This training can be conducted regularly and continuously to update teachers' knowledge and skills in managing learning with technology.

Overall, the use of technology such as ChatGPT can make an important contribution to learning. However, technology can only be a tool and cannot replace the teacher's role entirely. Therefore, it is necessary to integrate technology in learning in an appropriate and effective way and develop competence for teachers in managing learning with technology. In this way, the use of

technology can help improve the quality of learning and provide greater benefits for students and teachers.

CONCLUSION

In the context of using ChatGPT in learning, it should be noted that technology can only be a tool and cannot replace the role of the teacher entirely. Therefore, it is necessary to integrate technology in learning in an appropriate and effective way and develop competence for teachers in managing learning with technology. In this case, the role of teachers remains important in the learning process. Teachers need to have sufficient understanding of the technology used and be able to utilise it well in the learning process. In addition, teachers also need to develop new skills and competencies in managing learning with technology.

The suggestion is to conduct training and competency development for teachers in managing learning with technology, including the use of ChatGPT. This training can be conducted periodically and continuously to update teachers' knowledge and skills in managing learning with technology. In addition, it is also necessary to consider other aspects such as the availability of adequate infrastructure and human resources to manage technology in learning. In this way, the use of technology can help improve the quality of learning and provide greater benefits for students and teachers.

REFERENCES

- Ausat, A. M. A. (2022). Positive Impact of The Covid-19 Pandemic on The World of Education. *Jurnal Pendidikan*, 23(2), 107–117. <https://doi.org/10.33830/JP.V23I2.3048.2022>
- Ausat, A. M. A. (2023). The Application of Technology in the Age of Covid-19 and Its Effects on Performance. *Apollo: Journal of Tourism and Business*, 1(1), 14–22. <https://doi.org/10.58905/apollo.v1i1.8>
- Ausat, A. M. A., Suherlan, S., & Azzaakiyyah, H. K. (2023). Is ChatGPT Dangerous for Lecturer Profession? An In-depth Analysis. *Jurnal Pendidikan Dan Konseling (JPDK)*, 5(2), 3226–3229. <http://journal.universitaspahlawan.ac.id/index.php/jpdk/article/view/13878>
- Cooper, G. (2023). Examining Science Education in ChatGPT: An Exploratory Study of Generative Artificial Intelligence. *Journal of Science Education and Technology*, 3, 1. <https://doi.org/10.1007/s10956-023-10039-y>
- Fauzi, F., Tuhuteru, L., Sampe, F., Ausat, A. M. A., & Hatta, H. R. (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>
- Haleem, A., Javaid, M., Qadri, M. A., & Suman, R. (2022). Understanding the role of digital technologies in education: A review. *Sustainable Operations and Computers*, 3, 275–285. <https://doi.org/10.1016/j.susoc.2022.05.004>

- Harahap, M. A. K., Suherlan, S., Rijal, S., & Ausat, A. M. A. (2023). Defining the Business Philosophy Foundation for Sustainable Business Education. *Journal on Education*, 5(4), 15776–15783. <https://doi.org/10.31004/joe.v5i4.2690>
- Harahap, M. A. K., Sutrisno, S., Fauzi, F., Jusman, I. A., & Ausat, A. M. A. (2023). The Impact of Digital Technology on Employee Job Stress: A Business Psychology Review. *Jurnal Pendidikan Tambusai*, 7(1), 3635–3638. <https://jptam.org/index.php/jptam/article/view/5775>
- Kamar, K., Lewaherilla, N. C., Ausat, A. M. A., Ukar, K., & Gadzali, S. S. (2022). The Influence of Information Technology and Human Resource Management Capabilities on SMEs Performance. *International Journal of Artificial Intelligence Research*, 6(1.2), 1. <https://doi.org/https://doi.org/10.29099/ijair.v6i1.2.676>
- Kasneeci, E., Sessler, K., Küchemann, S., Bannert, M., Dementieva, D., Fischer, F., Gasser, U., Groh, G., Günemann, S., Hüllermeier, E., Krusche, S., Kutyniok, G., Michaeli, T., Nerdel, C., Pfeffer, J., Poquet, O., Sailer, M., Schmidt, A., Seidel, T., ... Kasneeci, G. (2023). ChatGPT for good? On opportunities and challenges of large language models for education. *Learning and Individual Differences*, 103, 102274. <https://doi.org/10.1016/j.lindif.2023.102274>
- Kraugusteeliana, K., Indriana, I. H., Krisnanik, E., Muliawati, A., & Irmanda, H. N. (2023). Utilisation of ChatGPT's Artificial Intelligence in Improving the Quality and Productivity of Lecturers' Work. *Jurnal Pendidikan Dan Konseling (JPDK)*, 5(2), 3245–3249. <https://doi.org/10.31004/jpdk.v5i2.13650>
- Kraugusteeliana, Surjati, E., Ausat, A. M. A., Pramono, S. A., & Prabu, H. K. (2022). A Literature Review on the Application of Technology During Covid-19 and Its Relationship to Performance. *International Journal Of Artificial Intelligence Research*, 6(1.2), 1. <https://doi.org/https://doi.org/10.29099/ijair.v6i1.2.765>
- Manafe, M. W. N., Ohara, M. R., Gadzali, S. S., Harahap, M. A. K., & Ausat, A. M. A. (2023). Exploring the Relationship Between Entrepreneurial Mindsets and Business Success: Implications for Entrepreneurship Education. *Journal on Education*, 5(4), 12540–12547. <https://doi.org/10.31004/joe.v5i4.2238>
- Prastyaningtyas, E. W., Sutrisno, S., Soeprajitno, E. D., Ausat, A. M. A., & Suherlan, S. (2023). Analysing the Role of Mentors in Entrepreneurship Education: Effective Support and Assistance. *Journal on Education*, 5(4), 14571–14577. <https://doi.org/10.31004/joe.v5i4.2511>
- Raharjo, I. B., Ausat, A. M. A., Risdwiyanto, A., Gadzali, S. S., & Azzaakiyyah, H. K. (2023). Analysing the Relationship between Entrepreneurship Education, Self-Efficacy, and Entrepreneurial Performance. *Journal on Education*, 5(4), 11566–11574. <https://doi.org/10.31004/joe.v5i4.2106>
- Rukman, W. Y., Urath, S., Harini, H., Ausat, A. M. A., & Suherlan, S. (2023). Philosophy Education as a Means of Developing Student Soft Skills. *Edumaspul: Jurnal Pendidikan*, 7(1), 281–286. <https://doi.org/https://doi.org/10.33487/edumaspul.v7i1.5458>

- Tuhuteru, L., Ausat, A. M. A., Pratiwi, E. Y. R., & Suherlan, S. (2023). The Role of Civic Education in Promoting Diversity and Tolerance in Schools. *Edumaspul: Jurnal Pendidikan*, 17(1), 275–280. <https://doi.org/https://doi.org/10.33487/edumaspul.v7i1.5456>
- Zen, A., Kusumastuti, R., Metris, D., Gadzali, S. S., & Ausat, A. M. A. (2023). Implications of Entrepreneurship Education as a Field of Study for Advancing Research and Practice. *Journal on Education*, 5(4), 11441–11453. <https://doi.org/10.31004/joe.v5i4.2091>