Research Article

Leveraging ChatGPT for Personalized Learning: A Systematic Review in Educational Settings

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Abstract. In today's digital world, personalization is a leading point for each learner to strengthen their educational achievements. Considering innovations in artificial intelligence (AI), particularly in the area of natural language processing, Chat GPT has sparked awareness as a viable mechanism for supporting personalized learning. The aim of the systematic review is to identify the present-day status of research on using Chat GPT for independent learning in educational settings. The research effort combines works that study Chat GPT application in learning environments, summarizing the results of a broad survey of scholarly literature. The significance of the Chat GPT in the learning path was identified from the previous studies. Also, the study discusses the practical difficulties and challenges of this technology. The study highlights some potential improvements by the Chat GPT, like improving the individual learning experience, offering seamless feedback and error corrections, encouraging study, and finding study metrics. Also, the study identified some potential challenges,

for example, data privacy, bias, accessibility of databases, and similarity between answers. There is a possibility for further research on this topic in advance to get more valuable ideas in the academic field. This comprehensive study examines a collection of AI-based personalized learning ideas to clearly enlighten the advantages and disadvantages of utilizing Chat GPT in an academic environment. Practitioners can gain a clear idea by referring to the article, which will maximize the usage of technology in the near future.

Keywords: ChatGPT, Personalized Learning, systematic Review, Educational Setting.

INTRODUCTION

A new technology that is rocking the world today is Chat GPT, Its virtualization is getting the majority of users' approval when it was introduced. This technology using (NLP Natural language processing) seeks to solve the problems of the users (Yogesh K, 2023). It is very important that we study artificial intelligence. AI is fully supervised by machines. The technique is to make an organism think as humans and other animals think. There are some examples, Speech recognition, Translation, and Computer vision all these can be analyzed by artificial intelligence. Chat GPT is a new evolution of artificial intelligence. It uses an NLP system. Various studies related to this are being carried out internationally. It provides relevant information to the users from the database which holds all the necessary information for the present-day application. These provide all the required information to the users from the already stored information. When a user hits a query it analyzes the relevant information and provides a suitable answer (Maad M. Mijwil1, 2023). The ChatGPT caters to the varied needs of the users. For example: Answering users' queries, Correcting wrong data when providing them the guidelines, Summarizing specific information, Helping with mathematical operations, Helping in writing letters, Helping creating poetry lines, Helping in solving riddles, Providing limitations of studies, Helping correcting cording lines and many more (Ismail Donmez, 2023).

Chat GPT uses deep learning languages while using NLP for resolving user requirements. By addressing some of the activities found in the past Chat bot system, it is seen to further expand the functional areas and provide the most relevant useful information to the agent. Chat GPT is an independent agent of AI Technology. Chat GPT is running on information based on its own database. On that basis, only the information up to 2021 is attached to the database as of now. So, it will not be possible to get new information after 2021. However, it is expected that this information will be incorporated very soon (Ismail Donmez, 2023). It's important to know about the Chat GPT solution is that it is fully functional and can be used in every part of academic writing so that the researchers can get the necessary information from it for their future writings. Today, digital literacy is used in all areas of education. However, in order to get its beneficial use, it should be used in a proper

manner. Today, various studies and strategies are being presented in relation to it (Yogesh K, 2023).

In the near future, the whole world is going to run on AI platforms using algorithms with the powerful language. We can see Chat GPT as the initial stage of that. The main product of AI algorithms is to analyze the human thoughts. Using this technology, various initiatives such as automatic car production are being carried out today. In the recent technologies such as Chat GPT 4 are also expected to be developed. They are designed to harness the power of computers to think like humans. AI tends to promote cognitive and behavioral processes just as stress is released in the human brain to cut off the power of thought. It will definitely help to improve the academic writings as well (Radha Firaina, 2023).

Problem Statement

In the theme of open AI, notably Chat GPT, which has become the most important topic in the modern world, today it is seen as a technique that is being used by many people in the education sector and is being subjected to various degrees of criticism. More specifically, this study attempts to carry out a literature review to investigate whether these ideas behind this technology are true or what percentage of them are acceptable, considering the issues of the impact of virtual science on self-learning and the challenges faced by it as the central parts of the study. Self-learning is the most important aspect of learning and teaching today. The conclusion of many studies today is that a student can learn more things through his own research than from the lectures or teachings of teachers.

Background of the study

However, due to the increasing use of chat GPT today, there are more chances of human efforts and searches decrease. Chat GPT technology is being used in various fields today. Examples: marketing, nursing, engineering, hospitality, tourism, politics, and publishing. However, its contribution to the education sector is seen to be enormous and that is why its impact on the education sector is more than any other sector (Jurgen Rudolph, 2022).

Chat GPT was launched on November 30, 2022, and gained 1 million users within five days. As far as its use is concerned, it has been used by many people like creative writers, software developers, songwriters, scholars, teachers, students, etc. in all fields and generally all of them use chat GPT in educational activities.(3,5) Who is using how much is given in the form of a chart and it is mostly used for education (Radha Firaina, 2023).

Literature Review
Overview of ChatGPT in Educational Settings

Rahman, M.M.D, Watanobe,Y. (2023) Conducted a Study titled **"ChatGPT for Education Research Opportunities, Threats, and Strategies"** This study explores the potential opportunities and threats that ChatGPT poses to overall education from the perspective of students and educators. Furthermore, it investigates how ChatGPT assists in programming learning and explores how it helps students improve their programming skills. To demonstrate this, the study conducted various coding-related experiments with ChatGPT, including code generation from problem descriptions, pseudocode generation of algorithms from texts, and code correction.

Adeshola, I., and Adepoju, A.P. (2023) Conducted a Study titled **"The Opportunities and Challenges of ChatGPT in education"** The launch of OpenAI ChatGPT's language-generation model has raised alarms within many sectors, especially the academic sector. Several academicians have urged universities to develop new forms of assessment after the launch of ChatGPT, which solves academic questions in less than a few minutes. Academic cheating is not a new phenomenon, and the use of AIgenerated text to cheat on assignments is a new type of cheating that poses unique challenges. This study utilized the Latent Dirichlet Allocation (LDA) method for topic modeling and the Valence Aware Dictionary for Sentiment Reasoning (VADER) method for sentiment analysis. After data preprocessing, 3870 tweets were still available out of the original 10,000 tweets that were extracted for the study. The VADER sentiment analysis results revealed that 2013 tweets were categorized as "positive," with the remaining 804 and 1053 tweets categorized as "negative" and "neutral." The analysis's findings indicate that the majority of people have favorable things to say about ChatGPT. Consequently, educational institutions can mitigate the disruptive effects of this technology and promote academic integrity by developing clear policies and guidelines and designing assessments that include limited AIgenerated text.

Baidoo anu, Owusu ansath. (2023) Conducted a Study titled **"Education in the era of generative Artificial Intelligence (AI): Understanding the potential Benefits of ChatGPT in promoting teaching and learning"** The aim of the study is to explore and synthesize recent literature on the potential benefits and drawbacks of using ChatGPT in promoting teaching and learning, given its rapid adoption and advanced capabilities in the field of education. The study identifies several benefits of ChatGPT, such as promoting personalized and interactive learning and generating prompts for formative assessment activities that provide ongoing feedback. It also highlights inherent limitations, including the generation of incorrect information, data training biases, and privacy issues. The study offers recommendations for leveraging ChatGPT to maximize teaching and learning, suggesting collaboration among policymakers, researchers, educators, and technology experts to use these AI tools safely and constructively to improve education and support student learning.

Firat, M. (2022). Conducted a Study titled **How ChatGPT Can Transform Autodidactic and open Education**" The objective of this research is to investigate Chat GPT's ability to enhance autodidactic learning and to provide insights into the best practices and approaches for utilizing chatbots and artificial intelligence (AI) tools in education. Additionally, the study aims to offer guidance for the future of education and the integration of technology into learning processes, with a focus on supporting the independence and independent study of autodidactic learners. The research findings may identify effective strategies for incorporating chatbots and AI tools into educational settings, enabling educators and students to more effectively use these technologies to enhance learning and development. Furthermore, policymakers can utilize the study's outcomes to formulate plans for integrating such technologies into educational environments and procedures, potentially democratizing education and making it more accessible and inexpensive.

Lo, C. K. (2023) Conducted a Study titled **"What is the Impact of ChatGPT on Education? A Rapid Review of the Literature"** The objective of this rapid literature review is to enhance understanding of ChatGPT's capabilities across various subject domains, its potential uses in education, and the issues identified by researchers during the first three months following its release (December 2022 to February 2023). The review found that ChatGPT's performance varied by subject, performing outstandingly in economics, satisfactorily in programming, and unsatisfactorily in mathematics. While ChatGPT can assist instructors (e.g., generating course materials and suggestions) and serve as a virtual tutor for students (e.g., answering questions and facilitating collaboration), challenges include generating incorrect or fake information and bypassing plagiarism detectors. The review recommends updating assessment methods and institutional policies, and providing instructor training and student education to address ChatGPT's impact on the educational environment.

Halaweh, M. (2023) Conducted a Study titled **"ChatGPT in Education: Strategies for responsible implementation"** This paper aims to thoroughly examine these issues and explore how ChatGPT can be used in education. It has two main goals: To argue for the inclusion of ChatGPT in education, To offer educators strategies and techniques for responsibly and successfully using ChatGPT in teaching or research. By achieving these goals, this paper seeks to encourage a more informed discussion about using ChatGPT in education.

Grassini, S. (2023) Conducted a Study titled "**shaping the future of Education: Exploring the Potential and Consequences of AI and ChatGPT in Educational Settings"** This paper explores the potential and problems of using advanced AI models in education. It reviews existing literature and helps understand how these technologies are changing educational norms in the current "new AI gold rush" era.

Sharma, S., Yadav, R. (2022) Conducted a Study titled **"ChatGPT- A Technological Remedy or Challenge for Education System"** This research aims to investigate whether Chat-GPT can be effectively used as a tool for teaching and learning within the educational system. The research explores both the potential advantages and disadvantages of using Chat-GPT in education, assessing its impact on the quality of student work, the role of teachers, and the overall costs and disruptions to educational institutions. Additionally, the study seeks to understand how to utilize this technology responsibly in educational settings. This article suggests that although Chat GPT is still in its early developmental stages, it has the potential to be used as a tool for teaching and learning. However, it is essential for both teachers and students to learn how to use this technology responsibly.

Impact of ChatGPT on Personalized Learning

Hong, W.C.H. (2023) Conducted a study titled **"The impact of ChatGPT on foreign language teaching and learning: opportunities in education and research"** The study aims to explain the mechanisms, functions, and common misconceptions about ChatGPT, highlighting the concerns and potential risks associated with its use in education, particularly in foreign language teaching. It explores how both learners and teachers to enhance second/foreign language teaching and assessments can utilize ChatGPT. Additionally, it suggests ways in which researchers can explore new avenues for personalized learning experiences using ChatGPT. The findings indicate that despite initial concerns, ChatGPT offers significant benefits for educators and educational institutions in improving language teaching and assessment, and presents valuable opportunities for research in personalized learning.

Bai, L., Liu, X., Su, J. (2023) Conducted a study titled **"ChatGPT: The cognitive effects on learning and memory"** The study aims to understand the impact of AI technologies, specifically ChatGPT, on cognitive functions in educational environments. It aims to explore both the potential benefits and risks associated with the integration of AI into education, particularly focusing on issues such as overreliance on AI and its effects on critical thinking and memory retention. The result of the study emphasizes the necessity for careful and judicious use of AI in education. It advocates for an integration approach that supports and supplements human cognitive functions rather than replacing them. The study concludes by calling for further research into the long-term cognitive effects of interacting with advanced AI models like ChatGPT.

Xiaoshu, X,Uz., et al. (2023) Conducted a study titled **"Applying ChatGPT to tackle the side effects of personal learning environments in higher education: a teacher and teaching perspective"** The aim of this study is to explore how ChatGPT can be applied to mitigate the side effects of Personal Learning Environments (PLEs) in higher education, specifically from the perspectives of

teachers and teaching. The result of the study reveals two main categories of side effects related to educational philosophy and teaching skills. It concludes that ChatGPT offers valuable tools to help educators overcome these challenges by enhancing the personalization of PLEs, aligning them with formal education requirements, designing innovative assessments, and improving learning engagement. The study provides insights that are beneficial to practitioners, researchers, and policymakers regarding the integration of ChatGPT with PLEs in higher education.

Yildiz, T.A. (2023) Conducted a study titled **"The Impact of ChatGPT on Language learners' Motivation"** The aim of the study is to explore the effect of integrating ChatGPT-generated dialogues into language teaching materials on the motivation of language learners. The study found that using ChatGPT in post-lesson activities significantly affected the motivation of language learners. The results, analyzed with SPSS, showed statistical differences in motivation test subcategories (self-regulation, intrinsic values, and test anxiety) between students who used ChatGPT and those who followed the traditional curriculum. ChatGPT provided feedback, personalized support, and guidance independent of time and place, which contributed to increased motivation and improvement in language learning.

Rasul, T., et al. (2023) Conducted a study titled **"The role of ChatGPT in higher education benefits, challenges, and future research direction"** The study aims to examine the potential benefits and challenges of using the generative AI model, ChatGPT, in higher education within the framework of constructivist learning theory. The study identifies five potential benefits of ChatGPT: facilitating adaptive learning, providing personalized feedback, supporting research and data analysis, offering automated administrative services, and aiding in the development of innovative assessments. It also highlights five challenges: academic integrity concerns, reliability issues, inability to evaluate and reinforce graduate skill sets, limitations in assessing learning outcomes, and potential biases and falsified information. The study argues for cautious use of ChatGPT by educators and students to ensure its ethical, reliable, and effective application. It proposes various measures, including educating users on responsible AI use, devising new assessment strategies, addressing bias and misinformation, and incorporating AI literacy into graduate skills. Balancing these benefits and challenges can enhance learning experiences in higher education.

Alshahrani, A. (2023) Conducted a study titled **"The impact of ChatGPT on blended learning: Current trends and future research direction"** The primary aims of this research are to contribute to the body of knowledge on AI applications for sustainable education and to provide insights for policymakers and educators on the benefits of AI in education delivery. The objectives include investigating the potential of AI techniques in enhancing the sustainability of educational systems, exploring the use of ChatGPT to personalize the learning experience and improve

engagement, and proposing a model for sustainable learning that incorporates AI. Additionally, the study aims to identify best practices for integrating AI in education, emphasize the significance of AI in sustainable education by addressing personalized learning and educational accessibility, and automate administrative tasks while optimizing content delivery for enhanced educational accessibility. Other objectives are to promote inclusive and equitable education through AI integration, highlight the potential benefits of AI chatbots like ChatGPT in promoting student engagement, motivation, and self-directed learning, and provide valuable guidance for educators, policymakers, and instructional designers on leveraging AI technology in education. Finally, the study seeks to recommend directions for future research to maximize the benefits of integrating ChatGPT into learning systems. The study has observed positive results, including improved learning outcomes, enhanced student engagement, and personalized learning experiences. These results suggest that the utilization of AI tools like ChatGPT can make blended learning systems more sustainable, efficient, and accessible for learners worldwide.

METHODOLOGY

This comprehensive article explores ChatGPT implementation for self-learning in educational settings, applying an exhaustive approach. A number of academic records, which include Google Scholar, IEEE Explore, Scopus, PubMed, and Web of Science, along with literature resources such as technical reports and conference papers, were considered to gather the data. The study focuses on the articles that were published after 2018 and includes some criteria, such as those associated with ChatGPT in educational settings. Key outcomes, approaches, and Survey features were collected as data for research. Important concepts, positive aspects, challenges, and potential future paths are determined using narrative approaches. Although numerous limitations were found, like cultural bias and rapidly changing technologies, This review article delivers crucial information to academics, policymakers, and researchers.

Future Directions and Recommendations

Identifying future research paths and possibilities for improvement in ChatGPT is important for individualized learning. Future research is required to focus on ChatGPT's long-term impact on student involvement and academic accomplishments. It is imperative to consider ethical implications, notability, algorithmic bias, and data security. In addition, it is necessary to establish a neural network that adapts for more tailored responses to students' personal requirements as well as learning methods to enhance communication.

Recommendation for ChatGPT users:

Supervisors may use ChatGPT as a third tool to give learners specific guidance and input to guarantee the ethical implementation of artificial intelligence in education. The developers should focus on enhancing ChatGPT accessibility and user interface in order to make an efficient tool for self-learning.

Ideas for incorporating ChatGPT in professional development and learning:

Leveraging ChatGPT collaborative guidance, autonomous assessment, and immediate response, arranging programs for professional groups must show how to use the tool more effectively and efficiently. Encouraging teamwork between scholars and developers leads to ChatGPT's educational applications growing more innovative and productive.

Discussion and Challengers toward the ChatGPT

However, since how is an AI platform that can generate relevant answers to questions asked by users from its own data, it does not act like humans, especially in critical thinking. Inaccuracy, weakness in a logical flow, Lack of originality, and thus there are some setbacks, that's why the data available through chat GPT needs to be reviewed once again (Francesco Sanmarchi, 2023). There are lots of challengers based on AI technology but these are the most common in academic writing areas. By finding similarities and differences between both Ai and human activities, we can identify the shortcomings of the technology.

Significant of ChatGPT

It is a large language model developed by open AI. It is mostly used for various needs like text summarization, text translation, generating conversation, and getting the answers needed by the users.

Arguments about ChatGPT

Chat GPT technology is seen to be able to change the research ability of a researcher in the early times once (Ex: A Ph.D. reading person) they went to different libraries and got the books and carried out the research with the knowledge obtained from them. But today that method has completely changed and it is possible to download the necessary articles using various new technologies.

Chat GPT can be used to get the answers to the required questions, but the output is different in both methods. Beginners can get some specific data. Although various degrees of data can be obtained, innovative ideas are very rare with the use of new software and technologies for academic writing(Radha Firaina, 2023).In early times accurate technologies for detecting plagiarism like plagiarism checkers were not found. But in today's era, students' studies are examined using various methods, like various plagiarism-checking software, so there is no chance to copyright from others (Anupam Kumar patel, 2024). Therefore, even if technology such as chat GPT

is used, the information can be obtained easily, but sometimes there are chances of Electronic theft, and new technologies can be introduced to find them in the future.

Today's AI technology is the reason for the increasing use of chat GPT in the field of research, which challenges the various skills of researchers today including search, thinking, energy, calculation, error detection, referencing method, literature review, using methodologies, and some other critical areas (Francesco Sanmarchi, 2023).

Review by Users

The benefit of the research conducted by many higher education side lecturers from Indonesia is that they use chat GPT to collect more lecture notes. Very few of them are not interested in using chat GPT (Ismail Donmez, 2023). Sometimes they are reluctant to use new technology. Regarding academic research, the most involvement is seen in the lecturer's place and in depth students, so our study revealed that chat GPT is a supporting device for conducting research (Rebekah Lantz, 2023). It is considered by the researchers as fast technology because.

ChatGPT for Personalized Learning

ChatGPT presents numerous possibilities for learners, serving as an effective assistant for understanding and solving complex problems. It is particularly beneficial for those who prefer experimental and hands-on learning approaches. One significant advantage of ChatGPT is its capability to comprehend and respond to natural language queries, allowing learners to interact with it in a manner similar to conversing with a tutor (Wardat, 2024). This feature enhances its intuitiveness and learner-friendliness, making it suitable for various educational levels, from elementary to higher education, as well as for professional development.

ChatGPT aids in developing reading and writing skills by providing syntactic and grammatical suggestions. It can create practice exercises and quizzes for diverse subjects such as mathematics, physics, language, and literature. Additionally, ChatGPT can generate explanations and step-by-step solutions, fostering problem-solving skills and analytical thinking.

For students, ChatGPT can act as a virtual tutor to support their learning. It has six major functions categorized into two main aspects: learning (answering questions, summarizing information, and facilitating collaboration) and assessment (concept checking and exam preparation, drafting assistance, and providing feedback). ChatGPT's ability to facilitate collaboration is notable, as it can generate scenarios for group activities, provide discussion structures, real-time feedback, and personalized guidance to enhance group discussions and debates. In the assessment aspect, ChatGPT serves as a scaffolding tool for drafting and refining written assignments, prompting further questioning and encouraging the application of

knowledge and reasoning skills (Wardat, 2024). However, it is important that ChatGPT is used to aid rather than replace critical thinking and original work.

In terms of assessment, students can utilize ChatGPT as a scaffolding tool to draft, refine, and enhance their written assignments by correcting errors and adding references. ChatGPT's initial responses can prompt further questioning and encourage the application of knowledge and reasoning skills. However, it is important to use ChatGPT as an aid to improve writing and research skills rather than a replacement for critical thinking and original work (Kan Lo, 2023).

Moreover, ChatGPT supports group discussions and debates by offering personalized guidance. It can assist learners with disabilities through services like speech-to-text and text-to-speech. As a professional tutor, ChatGPT can help develop skills in language, programming, report writing, project management, and technical writing in fields such as medicine, law, and IT. Learners can engage in interactive discussions with ChatGPT, challenging its explanations and suggestions, thereby receiving real-time assistance anytime and anywhere)Rahman, Watanobe, 2023).

The successful use of AI for grading short answer responses in online learning environments has been demonstrated in previous studies. Additionally, an AI-powered automatic grader could serve as a valuable teaching aid for students, helping them achieve higher exam scores and contributing to a more impartial grading process. However, it is important to examine the significance of providing clear explanations and transparency in the grading process reported by these systems, as this is crucial for addressing ethical concerns and ensuring the technology's acceptability (Grassini, 2023).

ChatGPT for Personalized Instruction

ChatGPT can offer customized tutoring and feedback tailored to students' specific learning needs and progress. Studies have shown that a generative model-based conversational agent, like ChatGPT, can deliver personalized math tutoring, resulting in improved learning outcomes. These findings indicate that such conversational agents can effectively address students' misconceptions with tailored explanations and adapt to their individual levels of understanding (Yogesh K, 2023).

ChatGPT in Interactive Learning

ChatGPT can facilitate interactive learning experiences, enabling students to engage with a virtual tutor in a conversational manner. Using a generative model-based conversational agent can effectively support students learning English as a second language, leading to enhanced language proficiency. This agent is capable of comprehending students' questions and providing suitable and relevant responses (Anu, Ansah, 2023).

ChatGPT in Language Translation

ChatGPT can assist in translating educational materials into various languages, making them more accessible to a broader audience. A generative model like ChatGPT, trained on bilingual sentence pairs, has proven to translate languages accurately, achieving high standards on multiple translation benchmarks. This model can comprehend sentences in one language and produce precise translations in another (Branislav Bédi1, 2023).

ChatGPT in Adaptive Learning

ChatGPT can be utilized to develop adaptive learning systems that modify their teaching strategies according to a student's progress and performance. An adaptive learning system based on a generative model like ChatGPT can offer more effective support for students learning programming, leading to better performance in programming assessments. This model can gauge students' knowledge and adjust the difficulty of the problems it generates accordingly (Anu, Ansah, 2023).

ChatGPT can help students learn better by using a method called constructivism, which builds on what they already know. This makes learning easier by connecting old knowledge with new ideas, creating new understanding. Because ChatGPT talks with students, it helps them actively build their knowledge by keeping them engaged, encouraging them to find patterns, and letting them learn through trying things out, which is key to creating knowledge.

In a smart learning environment, ChatGPT can use big data and learning analytics to keep track of student performance, predict how well they will do, and respond to their needs and emotions in real-time. This leads to personalized adaptive learning that matches the constructivist approach (Tareq Rasu et al., 2023).

Using ChatGPT in education helps students by providing personalized learning experiences, using resources efficiently, and adapting the learning process to improve results for everyone. This matches the ideas of constructivist theory. ChatGPT helps students develop thinking and problem-solving skills by allowing them to learn through discovery. This approach supports personalized learning with a spiral curriculum, where topics are revisited multiple times during a student's education. This helps students discover knowledge on their own and evaluate their learning, improving their problem-solving skills.

ChatGPT for Assessment Activities

In higher education, innovative assessment activities are gaining popularity for their ability to engage students with learning resources, foster critical thinking, and provide real learning experiences. Based on constructivist theory, methods like e-portfolios for self-regulated learning and collaborative assessments for peer and self-evaluations are suggested. These activities create a learner-centered environment and offer a meaningful evaluation of student outcomes. ChatGPT is

recognized for its potential to enhance these assessments by developing questions, lesson plans, and curricula. It supports personalized learning, fosters creativity, critical thinking, and promotes collaborative learning through real-time feedback and interactive engagement (Tareq Rasu et al., 2023).

ChatGPT can help by giving initial ideas for assessment design, creating multiplechoice or short-answer questions for teachers, and making drafts of case studies or other assessments that can be edited later. It can also be used in assessment tasks where students review and improve generated text or essays. This helps them create highquality articles, challenge their current thinking, and develop critical thinking skills.

Enhancing Vocabulary

ChatGPT can create custom word lists for students. By inputting a list of words, ChatGPT generates sentences using those words, helping students understand and learn their meanings.

Generating Writing Ideas

ChatGPT can provide numerous writing prompts based on specific themes. Teachers can input a theme, and the tool will generate various prompts, encouraging students to practice writing and think creatively.

Storytelling and Narration

ChatGPT can assist students in improving their storytelling skills. By inputting the beginning of a story, the tool suggests possible continuations, allowing students to develop the story further in their own words.

Reading and Comprehension

ChatGPT enhances reading comprehension by generating questions based on a given passage. Students can input a passage, and the tool will produce a set of questions to help them understand and retain the information they read.

CONCLUSION

The challengers placed against chat GPT technology today may further stimulate the development of accuracies in the future. However, no matter what technology is taken, there are advantages as well as disadvantages, so there are various good things required for Academic writing in chat GPT along with some setbacks, we have studied them in the challenger's section.

Therefore, using artificial intelligent technology, research topics needed for academic research can be found, important data, conclusion, research boundaries, etc., but appropriate research questions needed for research, literature review, designing models, methodologies, sampling methods and size, information theft

methods, refreshing methods, source findings, literature examination and bibliography reviewing, etc. some challenges are found in gathering relevant data. Therefore, the data available through chat GPT cannot be linked to its complete content even if we use it as a helping source.

However, a survey using Google search can be a better option to use a chat bot as the AI algorithm provides more accurate data to travelers. So chat GPT means we can take the ideas it gives as a help but not completely rely on them

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