

The use of ChatGPT in office technology learning for class X MPLB 3 at SMK Negeri 1 Surakarta

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Abstrak

Penelitian ini bertujuan untuk mengetahui (1) mendeskripsikan penggunaan ChatGPT pada pembelajaran Teknologi Perkantoran kelas X MPLB 3 di SMK Negeri 1 Surakarta, (2) mengetahui hambatannya, serta (3) mengetahui solusi yang dilakukan guru dan siswa untuk mengatasi hambatan. Jenis penelitian menggunakan deskriptif kualitatif dengan pendekatan fenomenologi. Teknik pengambilan sampel secara purposive dan snowball sampling. Pengumpulan data menggunakan analisis dokumen, wawancara, dan observasi. Teknik uji validitas yang digunakan adalah triangulasi sumber data dan teknik. Analisis data dengan menggunakan teknik analisis interaktif. Hasil penelitian menunjukkan bahwa: (1) penggunaan ChatGPT pada pembelajaran teknologi perkantoran dinilai mudah, cepat dan praktis. Penggunaan ChatGPT dapat meningkatkan aksesibilitas pembelajaran dan sebagai alat bantu alternatif yang lebih terjangkau. Peningkatan literasi digital dirasakan dan siswa memiliki suasana belajar baru yang lebih menantang. Chat GPT dapat meningkatkan kepercayaan diri siswa dalam memahami materi, (2) hambatan yang dialami adalah kurangnya motivasi dan disiplin belajar siswa dalam bidang teknologi, kendala akses internet dan kompatibilitas perangkat, kesulitan dalam memilih prompt yang tepat, penurunan tingkat berpikir kritis dan penafsiran informasi, dan (3) solusi yang dilakukan yaitu dengan membebaskan anak mencari sumber belajar lain, menambah jaringan internet dan wifi yang dapat diakses oleh siswa dalam kegiatan pembelajaran, memasukkan prompt yang berbeda, dan meningkatkan kemampuan literasi informasi.

Kata kunci: teknologi pendidikan; literasi digital; inovasi pembelajaran; keterlibatan siswa; pelatihan kejuruan

Abstract

This study aims to (1) describe the use of ChatGPT in Office Technology learning class X MPLB 3 SMK Negeri 1 Surakarta, (2) identify the obstacles, and (3) find solutions implemented by teachers and students. This research is a qualitative descriptive method with phenomenological approach. Sampling techniques used are purposive and snowball sampling. Data collection methods include document analysis, interviews, and observations. The validity testing technique used is source and technique triangulation. Data analysis employs interactive analysis. The results of the research analysis: (1) the

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use of ChatGPT in office technology learning is considered easy, fast, and practical. The use of ChatGPT can enhance learning accessibility and serves as a more affordable alternative learning tool. There is an improvement in digital literacy, and new students experience, more challenging learning environment. ChatGPT can boost students confidence in understanding the material, (2) the obstacles include lack of student motivation and discipline in field of technology, internet access and device compatibility issues, difficulty selecting the right prompts, a decrease in critical thinking and information interpretation, and (3) the solutions include allowing students to seek other learning sources, enhancing internet wifi networks accessible to students, inputting different prompts, and improving information literacy skills.

Keywords: educational technology; digital literacy; learning innovation; student engagement; vocational training

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Introduction

Advancing technological development necessitates that individuals follow and master various forms of technology (Amala et al., 2023). Technological advancements in the digital era have brought significant changes across various aspects of life, including education. Technological progress and digitalization serve as key drivers in the industrial revolution 4.0, influencing how students learn and develop skills necessary to address future challenges. One approach to assist students in adapting to the industrial revolution 4.0 is by integrating technology into learning processes (Alimuddin et al., 2023).

Angraini (2022) explains that the development of Information and Communication Technology (ICT) and its facilities in Indonesia remains uneven. Teachers are required to adapt quickly to these conditions. They must master various technology-based applications and platforms for use in the learning process. Teachers no longer merely transfer knowledge but collaborate with students to utilize technology-based learning media relevant to the subject matter (Manik et al., 2023). The utilization of technology and digitalization assists educators in creating increasingly creative and innovative classroom learning spaces integrated with technology (Alimuddin et al., 2023).

To enhance educational quality in the increasingly evolving industrial revolution 4.0 era, the education sector is required to follow current media and technological developments (Putriani & Hudaidah, 2021). In Indonesia, this effort is supported by Law No. 14 of 2005 concerning Teachers and Lecturers, which states that in carrying out professional duties, teachers are obligated to improve and develop their academic qualifications and competencies continually in line with developments in science, technology, and arts. Therefore, integrating technology into the learning process is essential to enhance educational quality and relevance.

One innovation attracting attention in the industrial revolution 4.0 era within the education sector is Artificial Intelligence (AI). The world is now living in an artificial intelligence era that plays a crucial role across various fields of life (Kennedy, 2023). AI represents a contemporary technology emerging as a revolutionary technology (Iriyani et al., 2023). In the educational context, AI can offer alternative roles by enhancing human intelligence and assisting humans in performing learning tasks effectively (Rubini & Herwinsyah, 2023). The primary objective of AI is to enable computers to understand, respond to, and interact with humans in intelligent and natural ways (Setiawan et al., 2023). AI can also customize content for each student and provide rapid and relevant feedback (Anas & Zakir, 2024).

There are four fundamental concepts in AI definition as explained by John Paul Mueller (2018) in Kennedy (2023): (1) acting like humans: meaning computers behave like humans, (2) thinking like humans: meaning performing tasks requiring intelligence to succeed, which depend on introspection, psychological testing, and brain imaging, (3) thinking rationally: referring to how humans think using specific standards, and (4) acting rationally: referring to how humans act in certain situations under certain constraints. AI is generally used as a paradigm involving the use of intelligent techniques and

algorithms to enable computers to perform specific tasks. This AI technology has given rise to an increasingly popular application, namely ChatGPT (Chat Generative Pre-Trained Transformer).

ChatGPT (Chat Generative Pre-Trained Transformer) is an AI-based technology developed by OpenAI and designed to mimic human conversation using Natural Language Processing (NLP) technology (Setiawan & Luthfiyani, 2023). ChatGPT is a platform developed with the method of Reinforcement Learning from Human Feedback (RLHF) that responds to almost all words or sentences input into it (Supriyadi, 2022). This technology is becoming increasingly popular across various fields, including research and education, due to its ability to learn from large amounts of data and provide quality results (Diantama, 2023). In the industrial revolution 4.0 era, ChatGPT plays a crucial role in education. Education and AI represent important topics in discussions about the future. Integrating ChatGPT into education exemplifies the technological shift toward artificial intelligence (Javaid et al., 2023).

This technological transition can transform learning and teaching methods. By leveraging AI, learning activities can become more effective and interactive, creating a more responsive learning environment (Anas & Zakir, 2024). This can be observed from the benefits provided by ChatGPT, such as language translation, providing recommendations, increasing productivity, serving as an interactive learning resource, and assisting students in completing tasks and problem-solving (Pontjowulan H.I.A., 2023). The development of AI technologies like ChatGPT has the potential to completely transform students' approaches to academics and their educational fields (Setiawan et al., 2023).

One potential benefit of using ChatGPT is enhancing the accessibility and availability of information, facilitating users' access to various needed information anytime and anywhere (Sholihatin et al., 2023). The use of ChatGPT in the industrial revolution 4.0 era as a learning medium is highly recommended. The application of ChatGPT in education offers potentially significant benefits, such as increasing learning efficiency, providing individual support for students, and assisting educators in delivering more personalized learning (Diantama, 2023). ChatGPT has become an artificial intelligence tool that has attracted over 100 million monthly active users in a relatively short time (Diantama, 2023).

Hadian and Rahmi (2023) reveal that the implementation of ChatGPT in education, particularly in learning, brings significant changes to how students and teachers interact and collaborate in the classroom. Traditional learning that positions the teacher as the center is shifting to student-centered approaches. This represents one of the principles of the Merdeka Curriculum implementation, which emphasizes differentiated and student-centered learning. The presence of ChatGPT in learning constitutes a change as a form of educational transformation in this AI technology era.

Sakti et al. (2023) explain that Vocational High Schools (SMK) are formal educational institutions that conduct vocational education at the secondary level, equivalent to SMA/MA/MK. SMK represents secondary education aimed at enhancing knowledge and skills and requiring students to be able to work according to their respective fields. Therefore, schools need to prepare for and follow workforce trends. Amid these dynamics, Office Technology learning becomes increasingly relevant in preparing students for the workforce. Office activities are inseparable from the use of AI technology.

Khoiriyah and Puspasari (2021) reveal that Office Technology is a subject in the Office Management and Business Services Vocational program that is synonymous with office technology and studies how to utilize and use such technology. This includes methods of usage, processing, collecting, recording, calculating, sending, and duplicating. Widiananda and Rosy (2021) also state that Office Technology examines information from the virtual world as an effort to complete office activities. Students have the opportunity to integrate learning resources in completing office work and responsibilities. Technological advancements reinforce the importance of Office Technology in vocational education, preparing students for careers in modern office environments.

The implementation of new technologies like ChatGPT in Office Technology learning becomes relevant. However, to ensure successful usage, a deep understanding of the subjective experiences of students and teachers in interacting with ChatGPT is essential. Therefore, this research aims to comprehensively explore these experiences. First, this research will help identify factors influencing the success or failure of ChatGPT usage, such as resistance to change or skills gaps. Second, by understanding user perspectives, educational institutions can gain insights into ways to enhance ChatGPT usage in learning. This includes developing training, curriculum adjustments, or necessary technical changes.

This research will also reveal practical obstacles faced by students and teachers in using ChatGPT, which can then serve as a basis for designing appropriate and practical solutions. By enhancing

the relevance and effectiveness of learning, the use of ChatGPT can help vocational education remain at the forefront in addressing the demands of a dynamic work environment. This research will assist in aligning the development of AI technologies like ChatGPT with user needs and expectations, ensuring that this technology provides optimal benefits in the context of Office Technology learning.

Research by Kharis and Zili (2024) shows that the use of ChatGPT in learning provides opportunities for interactive, flexible learning experiences and introduces students to technology, particularly artificial intelligence. This aligns with 21st-century learning competencies. However, the use of ChatGPT also poses several challenges, such as academic integrity issues, social interaction concerns, and dependence on technology that may reduce students' critical thinking skills. Based on observations conducted by the researcher, it is known that there are several issues in the use of ChatGPT in Office Technology learning: (1) uneven technology access. Not all students have adequate access to technological devices such as smartphones and stable internet connections. This results in inequality that creates gaps in optimal educational access. (2) diverse digital skills among students. Not all students possess adequate digital skills to effectively utilize ChatGPT. This results in reduced effectiveness of ChatGPT usage as a learning aid. (3) dependence on AI. The use of ChatGPT raises concerns about students becoming overly reliant on ChatGPT to complete tasks. This results in a lack of critical thinking and problem-solving skills development.

This research will make a significant contribution to enriching understanding of ChatGPT usage in Office Technology learning, as well as assist in designing more effective strategies for implementing this technology in vocational education. How to use ChatGPT for learning, increase student engagement, and enhance material understanding. Additionally, researchers can promote the development of new ideas and practices in education that can enhance the student learning experience. This research will attempt to review the use of ChatGPT in Office Technology learning, identify learning obstacles, find solutions to these obstacles, and draw conclusions. Based on the background and previous research, the researcher will conduct a study titled: "The Use of ChatGPT in Office Technology Learning for Class X MPLB 3 at SMK Negeri 1 Surakarta."

Research Method

This research employs a qualitative descriptive method to understand phenomena and identify descriptive data in depth regarding the research subject. Qualitative research methodology is based on post-positivist philosophy, used to investigate natural object conditions (Sugiyono, 2013). This research was conducted at SMK Negeri 1 Surakarta, specifically focusing on class X MPLB 3.

Data collection techniques used were document analysis, interviews, and observation. The data collection procedure in this research was obtained through primary and secondary data searches. Primary data were derived from observations and interviews with informants regarding ChatGPT usage in Office Technology learning. Secondary data in this research were obtained from learning materials, photographs, and literature studies related to research issues.

Informants in this research were the Head of the Office Management and Business Services Competency who also serves as the teacher for Basic Subjects of Office Management and Business Services Vocational Elements of Office Technology for class X and Students of class X MPLB 3 SMK Negeri 1 Surakarta for the 2023/2024 academic year. This research employed two sampling techniques: purposive sampling by selecting sources considered to have a deep understanding of research issues and snowball sampling by seeking other informants to complement required data sources.

This research utilized data validity tests through technique triangulation and source triangulation, by differentiating data obtained from main informant interviews with supporting informants to obtain valid data, as well as conducting observations to strengthen data obtained from interview results. This research used Miles and Huberman's theory analyzed using interactive descriptive techniques, data collection, data reduction, data presentation, and conclusion drawing.

Results and Discussion

Data collection techniques included interviews with the Head of the Office Management and Business Services Competency who also serves as the teacher for Basic Subjects of Office Management and Business Services Vocational Elements of Office Technology for class X and Students of class X

MPLB 3 SMK Negeri 1 Surakarta for the 2023/2024 academic year. Based on these data collection techniques, the following research results and discussions were obtained:

Research Results

The use of ChatGPT in education offers significant benefits in enhancing the efficiency and effectiveness of the learning process. This is evidenced by several facts, including ChatGPT's ability to assist in creating learning materials, answering student questions, developing assessments, and aiding in understanding difficult concepts by providing easily comprehensible explanations. ChatGPT usage supports the teacher's role in the learning process. ChatGPT can develop ideas and enhance student assignments, allowing teachers to identify that students have attempted to generate ideas and develop new ones.

The phenomenon of ChatGPT usage has attracted substantial public attention worldwide, including in the education sector. The presence of ChatGPT assists teachers and students in learning to generate new ideas quickly. Beyond education, ChatGPT can assist in worship activities. Students use ChatGPT for problem-solving and as an interactive learning resource. Another potential offered by ChatGPT is to enhance user productivity. ChatGPT provides strategies that can be applied to maximize efficiency and effectiveness in completing daily tasks.

Teachers' and students' perceptions regarding ChatGPT usage are deemed helpful and beneficial for learning as a reference for teaching materials and an additional technology-based learning medium. Student enthusiasm is reflected in their positive reactions. Additionally, this technology is free and easy to use. Compared to other search engines, ChatGPT is more effective and efficient because the answers produced are logical and accompanied by explanations for each point. This is what student learners need. There are numerous reference materials beneficial for teachers in preparing learning materials. However, its weakness is that if the required material is new, the answers produced may be incomplete because not many people have researched the topic.

If the answers produced by ChatGPT do not meet needs, students use different keywords that are more relevant to the problem. Students are fully aware not to consume information uncritically. They continue to read and seek other references, then verify all sources. However, some concerns arise when students are reluctant to read. Although students still seek other references, this could reduce users' critical thinking levels. ChatGPT usage is considered easy, clear, detailed, and comprehensive compared to other search engines. ChatGPT provides answers that meet user requirements with non-monotonous explanations and developed points. Another potential is a personalized and effective learning experience according to needs.

ChatGPT provides teacher and student experiences in learning that integrates technology in the current era. Students can exchange ideas, experiences, and learning with peers, thus enhancing technology usage by adopting new technologies. Regarding student-teacher interactions, some students continue to ask questions to verify answers, while others do not ask because they find ChatGPT's explanations clear. Therefore, to reduce data bias, teachers must continue to provide understanding to students.

There is an increase in student confidence and understanding of learning after using ChatGPT. The answers produced are logical and easily understood by users. Understanding of learning material occurs when students encounter problems such as lack of focus and unclear teacher explanations. Teacher assessments of student understanding must still be adjusted to assessment criteria. An example criterion is the extent of student analysis in selecting obtained information. The improvement in student learning outcomes quality is not significantly different, but differences are still apparent.

The use of ChatGPT in learning can help reduce technological disparities among students. By providing equal access for students to use advanced technology in learning, teachers can help reduce gaps in technological skills that may exist among students. This will help ensure that all students have equal opportunities to learn and develop in the digital era.

Based on the use of ChatGPT in Office Technology Learning for Class X MPLB 3 at SMK Negeri 1 Surakarta, it is known that obstacles exist. The obstacles in using ChatGPT in Office Technology Learning for Class X MPLB 3 at SMK Negeri 1 Surakarta include lack of student motivation and discipline in the technology field, internet access and device compatibility issues, difficulty in selecting appropriate prompts, and decreased critical thinking and information interpretation abilities.

Solutions to address obstacles in using ChatGPT in Office Technology Learning for Class X MPLB 3 at SMK Negeri 1 Surakarta include teachers allowing students to seek alternative learning sources, enhancing internet and WiFi networks accessible to students during learning activities, inputting different prompts, and improving information literacy skills.

Discussion

The phenomenon of ChatGPT usage represents the development of digital era skills that educators and learners can utilize. Enhanced efficiency and ease of interaction with technology are readily available to humans today. This technology provides ease in finding information that was previously only available from literature sources; however, now even unexplored subjects can be broadly accessed without limitations. This creates attraction for users to utilize ChatGPT.

The use of ChatGPT as a learning tool offers significant benefits in enhancing student interaction in the learning process. Additionally, ChatGPT provides ease of access and speed in delivering information to students. Another advantage is ChatGPT's ability to provide real-time feedback. In the educational context, ChatGPT usage can increase efficiency and effectiveness in the learning process. This is evidenced by ChatGPT's capability to assist in creating learning materials, answering student questions, developing assessments, and helping students understand difficult concepts through easily comprehensible explanations. Furthermore, the artificial intelligence possessed by ChatGPT can also assist in scholarly writing, simplifying the academic writing and publishing process, and helping scientists organize materials, create initial drafts, and perform corrections (Nita et al., 2023).

The Office Management and Business Services (MPLB) Skills Program is a program that equips students with skills, knowledge, and attitudes to be ready to enter the real work environment. One of the subjects in this skills program is Office Management with Office Technology Elements. The digital era does not limit Office Technology Elements to traditional learning concepts but provides students with new learning experiences by implementing AI technology in the learning process. Students have a new learning atmosphere and style that can enhance learning quality. This aligns with research by Auna et al. (2024), which suggests that combining skills programs and AI technology makes a valuable contribution to shifting focus toward AI development focused on improving overall educational quality and student empowerment.

The rapid and significant advancement and development of artificial intelligence (AI) has formed new habits; society currently uses AI to simplify daily human activities. However, concerns arise because society does not yet understand what AI does to address problems. Subsequently, society begins using AI, and researchers have created chatbots, artificial intelligence, and ChatGPT, offering various conversation types tailored to human needs (Maulana et al., 2023).

Based on Misnawati (2023) research findings, ChatGPT enhances user productivity and creativity. This corresponds with the researcher's findings that in the learning process, ChatGPT is used in searching for materials to prepare presentation materials for oneself and leadership. This is not significantly different from previous research findings conducted by Sahabudin (2023), which show that using ChatGPT as a learning aid provides various benefits to users. Thus, users can foster productivity and creativity by benefiting from this AI technology.

Student enthusiasm for ChatGPT is very high. The potential for individual student learning experiences increases with greater accessibility to learning resources (Fitrianinda et al., 2024). This accessibility provides ease in completing tasks because the information presented is accompanied by appropriate, complete, and easily understandable explanations. Teachers use ChatGPT as a reference in preparing teaching materials. Students need this technology because it can be accessed easily, anytime, and anywhere according to needs. Students compare ChatGPT with Google and state that ChatGPT is easier, more detailed, and clearer. There are no difficulties encountered in its use; the answers produced are not monotonous and are accompanied by explanations that make it easier for students to understand learning material. ChatGPT usage is considered to enhance learning effectiveness and efficiency.

The primary role of ChatGPT is to provide more interactive and engaging learning facilities (Harmin et al., 2024). Based on research conducted by Merentek et al. (2023), the presence of ChatGPT provides support to teachers and students in learning, enabling them to obtain information quickly and accurately. The information provided is explained comprehensively and in detail according to user needs. This aligns with Suharmawan (2023) research that ChatGPT enables its users to personalize learning by

synchronizing materials according to needs quickly and providing relevant guidance according to comprehension levels.

One aspect to remember is that this technology still has limitations in understanding and is not yet able to distinguish between facts and opinions (Suharmawan, 2023). Although it can be used as an additional aid, human creativity cannot be replaced by technology. Recent information that has not been widely researched will be difficult to obtain, because ChatGPT's operation uses autoregressive language modeling techniques. According to Rachbini et al. (2023), this technique predicts subsequent text and processes repeatedly until coherent sentences and paragraphs are formed.

Based on Pontjowulan (2023) research, full awareness of technology usage in learning must note that it is only an aid that cannot replace the educator's role. This is consistent with the researcher's findings that students still need the teacher's role to provide good direction. Students compare teacher explanations with ChatGPT. This represents an appropriate and effective integration of technology in learning and the development of educator competencies in managing technology-based learning.

Pontjowulan (2023) research suggests that ChatGPT usage in learning provides an alternative for educators who serve as facilitators in facilitating student learning. This aligns with the researcher's findings that when teachers have not yet explained learning material, students can learn independently using ChatGPT facilities. Sometimes teachers are unclear in explaining, and students are not focused on learning; students can use ChatGPT to help deepen their understanding. This is consistent with Pontjowulan (2023) research, which suggests that ChatGPT can serve as an aid for students to ask difficult-to-understand questions; this technology will provide answers in simple language.

The use of ChatGPT in learning has changed classroom dynamics by providing a significant boost to students' confidence levels in understanding learning material. Students often feel doubtful or uncertain about the answers they produce before using ChatGPT. The presence of ChatGPT helps students as a tool to provide answer certainty. ChatGPT positively impacts anxiety felt by students (Diantama, 2023). The answers produced by ChatGPT are based on strong logic and reasoning. This gives students confidence that they understand the material correctly. This makes students feel more confident in participating in class discussions, answering questions, and even asking in-depth questions.

Assessment is the process of determining student competency achievement during and after the learning process. This assessment is conducted by teachers by providing different criteria from the previous assessment criteria using ChatGPT. This aligns with research by AlAfnan et al. (2023), which suggests that teachers are advised to change assessment criteria by providing detailed guidelines based on topics that should be added according to given directions to complete tasks. Changing assessment criteria provides teachers with an understanding of the extent of students' analytical abilities and critical thinking. Teachers also need to have the ability to evaluate and provide accurate assessments of student abilities (Ausat et al., 2023).

With awareness of the importance of a world increasingly connected through digitalization, these teachers will view ChatGPT usage as part of learning outcomes. The use of technologies like ChatGPT is not just an aid but also a skill that needs to be taught to students to be proficient in facing a world increasingly connected to technology. This aligns with research by Rahman et al. (2023) that students need to have skills and knowledge relevant to their field of study to compete in the work environment. Therefore, in the long term, it is expected that technology teachers will continue to use ChatGPT in learning because it is one role in equipping students with knowledge and technological skills relevant to the future.

The long-term impact of ChatGPT usage in education will help create teachers who are accustomed to integrating technology in teaching and preparing to face continuing technological changes in the education world. Therefore, ChatGPT usage in learning not only enhances teaching efficiency but helps shape the future for more inclusive, innovative education ready to face upcoming technological challenges. This aligns with research by Sumarlin et al. (2024), which suggests that technology plays a role in school learning to enhance quality learning, create an inclusive and student-oriented learning atmosphere, and prepare students to become skilled and competitive global citizens in the current digitalization era.

Obstacles in using ChatGPT in Office Technology Learning for Class X MPLB 3 at SMK Negeri 1 Surakarta include: (1) lack of student motivation and discipline in the technology field. Students face several obstacles in using ChatGPT that can be categorized into technical and operational difficulties. The main technical difficulty is the login process, where students often forget their personal email account

passwords. This indicates students' lack of experience in password management and insufficient learning about effective information management. Additionally, students also experience difficulties in responding to ChatGPT, especially in providing clear and specific instructions. Operational difficulties also arise related to student motivation and discipline toward technology. Not all students have the same interest in technology, so some may be less motivated to learn how to use ChatGPT. This aligns with research by Auna et al. (2024), which suggests that users may need time to adapt to the technology interface. Comprehensive training efforts are needed to ensure that teachers have an adequate understanding of how to use this technology effectively (Indriani et al., 2024). (2) internet access and device compatibility issues. Teachers and students often face constraints in accessing ChatGPT effectively due to limited internet quota. Internet connection instability also disrupts learning. Connection disruptions that occur frustrate teachers and students and reduce learning effectiveness. This aligns with research by Auna et al. (2024), which suggests that unstable internet connections become one obstacle in using ChatGPT. Some students criticize the unavailability of internet data packages. Device compatibility also becomes a challenge. Not all students have adequate devices required to use ChatGPT. This exacerbates inequalities in educational technology access. This aligns with research by Indriani et al. (2024) that inadequate infrastructure such as slow internet connections or limited devices can be significant obstacles in widely implementing this technology. Therefore, solutions need to be implemented to ensure that adequate technology access is available in all educational environments. (3) difficulty in selecting appropriate prompts. The next obstacle in using ChatGPT is related to sentence formulation issues, especially when inputting questions. Although ChatGPT has advanced capabilities in understanding and responding to human language, its success depends on user-posed questions. This aligns with research by Auna et al. (2024), which suggests that some students experience difficulties in formulating questions that ChatGPT can understand. (4) decreased critical thinking and information interpretation abilities. Not all users have the patience to read information provided by ChatGPT. This can cause decreased critical thinking levels because users tend to accept information without conducting in-depth evaluation and analysis. There is a risk of becoming dependent on ChatGPT as the sole information source, resulting in loss of learning context; this can hinder critical thinking skills important for students. Teachers and students need to understand well the advantages and limitations of ChatGPT and ensure its use is wisely regulated (Kharis & Zili, 2024). Although ChatGPT can provide rich and in-depth information, long and detailed explanations become obstacles for some users. The main issue that arises is the difficulty in filtering relevant information from unnecessary additional information. This can disrupt learning and hinder effective understanding. ChatGPT can make valuable contributions in facilitating the learning process, but the teacher's main role in providing guidance, deep understanding, and rich human interaction remains irreplaceable (Kharis & Zili, 2024).

Solutions to address obstacles in using ChatGPT in Office Technology Learning for Class X MPLB 3 at SMK Negeri 1 Surakarta include: (1) allowing students to seek alternative learning sources. Teachers give students freedom to choose other learning sources, including traditional literature, but still emphasize the importance of using modern technology like ChatGPT. Despite having options, students are expected to master ChatGPT due to its relevance in the digital era. This approach supports student learning preferences and ensures familiarity with the latest technology. If teachers give students freedom to seek references to receive relevant information, then students can build procedures well and complete tasks well (Ratnawati et al., 2023). (2) enhancing internet and WiFi networks accessible to students during learning activities. Obstacles such as internet access and device compatibility issues can be addressed by schools enhancing internet and WiFi networks accessible to students during the learning process and teachers bringing students to school laboratories. When students are in school laboratories, encountered obstacles can be minimized. In laboratories, students can better enjoy learning because they do not need to worry about internet access. Additionally, schools can provide WiFi access to students to support learning activities in the classroom. With adequate infrastructure support, ChatGPT's potential in enhancing interaction and understanding of subject matter can be better realized. Without adequate infrastructure, students and teachers will face difficulties in accessing and using technology effectively (K et al., 2024). (3) inputting different prompts. Obstacles in selecting appropriate prompts can be addressed by re-entering questions with different prompts that have the same meaning. Users must carefully consider how to formulate questions so that ChatGPT can provide relevant and accurate responses. By formulating questions in detail and clearly, users maximize ChatGPT's ability to provide answers that meet needs. Additionally, avoiding unclear language usage can help reduce the possibility of

misunderstandings in provided responses. Therefore, in interacting with ChatGPT, users are advised to pose questions with concrete, concise, and clear sentences to obtain optimal responses. ChatGPT is created to be sensitive to query adjustments so that shared answers are accurate (Suharmawan, 2023). (4) improving information literacy skills. Improving information literacy skills is done by reading all answers produced by ChatGPT. This is a solution to reduce students' decreased critical thinking levels and difficulties in interpreting information. When students feel that the answers produced are not appropriate, they will input different keywords with the same meaning. This certainly requires critical thinking competencies so that ChatGPT responses meet what is desired (Setiawan & Luthfiyani, 2023). Students can better understand the context and ensure that they are not only passively receiving information but also actively processing and evaluating the accuracy and relevance of information. The answers produced by ChatGPT are very long; therefore, they require thoroughness in reading so that users find the core of the needed information.

Conclusion

Based on the research findings presented from the field and data analysis conducted regarding The Use of ChatGPT in Office Technology Learning for Class X MPLB 3 at SMK Negeri 1 Surakarta, the conclusions that can be drawn are that the use of ChatGPT in Office Technology Learning for Class X MPLB 3 at SMK Negeri 1 Surakarta is considered easy, fast, and practical. ChatGPT usage can enhance learning accessibility and serve as a more affordable alternative aid. Additionally, it can increase effectiveness and efficiency in providing instant feedback. Digital literacy improvement is experienced, and students have a new, more challenging learning environment. Students show greater interest in learning activities. ChatGPT usage can enhance students' confidence in understanding material. The assessment method used by teachers is to change and adjust assessment criteria according to cases solved by students. Office Technology teachers will continue to use technology in learning because technology will remain relevant to equip students with skills relevant to an increasingly digitally connected future. Obstacles experienced by teachers and students when using ChatGPT in Office Technology learning include lack of student motivation and discipline in the technology field, internet access and device compatibility issues, difficulty in selecting appropriate prompts, and decreased critical thinking and information interpretation abilities. Solutions to these obstacles include teachers allowing students to seek alternative learning sources, enhancing internet and WiFi networks accessible to students during learning activities, inputting different prompts, and improving information literacy skills. The overall research findings discuss how ChatGPT is used in Office Technology Learning for Class X MPLB 3 at SMK Negeri 1 Surakarta. These findings indicate that using ChatGPT as a learning support tool provides opportunities for more interactive, flexible, dynamic, and personalized learning experiences. This research attempts to add insights, knowledge, and perspectives regarding ChatGPT Usage in Office Technology Learning for Class X MPLB 3 at SMK Negeri 1 Surakarta. These findings are expected to provide awareness for educators to equip students with skills relevant to an increasingly digitally connected future. This will ensure that education remains relevant to the demands of the times and that students are ready to face future challenges.

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