Language Literacy: Journal of Linguistics, Literature, and Language Teaching
Volume 9, Number 1, pp: 152-159, June 2025
e-ISSN: 2580-9962 | p-ISSN: 2580-8672
DOI: https://doi.org/10.30743/ll.v9i1.10765

TEACHERS AND STUDENTS' PERCEPTION OF AI IN ACCOUNTING EDUCATION: A CASE STUDY

Ahadi, Surya Jatmika
Universitas Muhammadiyah Surakarta (UMS), Sukoharjo, Indonesia
E-mail: a210210052@student.ums.ac.id

Received: 2025-02-18 Accepted: 2025-03-18 Published: 2025-02-18

Abstract

This study explores the perception of teachers and students at SMKN 1 Boyolali regarding the integration of Artificial Intelligence (AI) in accounting education. Using a qualitative case study approach, data were collected from three accounting teachers and three students through interviews and observations. The findings show that AI improves data analysis, personalizes learning, and provides instant feedback, aiding students in understanding complex accounting concepts. In addition, AI also contributes to the efficiency of administrative task management and the provision of more interactive teaching materials. However, obstacles such as limited infrastructure, inadequate internet connectivity, and lack of training for teachers and students hinder the optimal use of AI in the learning process. The study underscores the need for improved technology infrastructure, more comprehensive teacher training, and supporting policies that can encourage the effective use of AI in vocational accounting education. Thus, the results of this research are expected to provide insight for stakeholders in designing AI-based learning strategies that are more innovative and relevant to the latest technological developments.

Keywords: Accounting education; artificial intelligence; perception of teachers and students

1. Introduction

Artificial Intelligence (AI) technology is currently experiencing rapid development since it was first developed in the mid-20th century. Artificial intelligence (AI) technology, which was initially just an analysis tool, is now able to provide predictions, adapt learning content, and monitor student progress. The rapid development of artificial intelligence (AI) technology and its impact on various aspects of life, including education (Zendrato, 2024). In education, AI can influence students' morale and character, improve mental acuity, and provide valuable new insights into their learning process (Wahyudi, 2023). One of the most prominent applications of AI is an adaptive learning system that can adapt the material according to the needs of each individual student (Sari et al., 2022). With this change, all parties in the world of education are expected to be able to adapt to the rapid development of technology.

In the context of accounting education, the role of AI is very innovative in increasing the effectiveness of learning. This technology allows for personalization of learning experiences and automation of administrative tasks, leading to improved quality and

efficiency of education (Afrita, 2023; Rochmawati, Arya, & Zakariyya, 2023). In accounting learning, AI has been utilized through various platforms, such as Chatbots that can answer student questions in real-time and artificial intelligence (AI)-based learning applications that help understand accounting concepts (Apriliani, Handayani, & Saputra, 2023; Fitri & Putri, 2024). The use of AI in accounting learning has been applied through various platforms, such as chatbots that can answer student questions in rea

l-time, as well as AI-based learning applications that help understand accounting concepts (Pasyarani, 2023). Additionally, technologies such as ChatGPT facilitate faster and more efficient access to information for students and educators (Yunarzat, Sida, & Makassar, 2024). Despite the many benefits offered by AI, research on teacher and student perceptions regarding the use of AI in accounting learning is still limited. Previous research focused more on the development of AI-based learning media and training in its use to improve accounting learning skills (Maryani & Sari, 2023). The research highlights the potential for the development of AI-based accounting models that can improve efficiency in the management of repetitive accounting tasks. Meanwhile, (Handayani, Yasin, Nasrul, & Setiawan, 2024) shows that training in the use of AI, such as ChatGPT, provides significant benefits for students and educators in the learning process.

Based on the results of initial observations, the application of AI in accounting learning at SMKN 1 Boyolali shows promising indications. AI technologies such as ChatGPT and Gemini AI have assisted educators in creating teaching materials for accounting learning. However, the use of AI is still limited to the creation of teaching materials and has not been optimally integrated into the daily learning process (Anwar & Mufidah, 2024). In addition, accounting software such as Accurate and MYOB Accounting are used to record automated transactions and compile financial statements. The implementation of AI-based adaptive learning systems has also helped to tailor learning materials to the needs of students and educators, although limited infrastructure and digital skills are still the main obstacles (Al Fadillah, Akbar, & Gusmaneli, 2024).

SMKN 1 Boyolali as one of the vocational schools that has an accounting expertise program in Indonesia continues to strive to improve the quality of learning by adjusting their curriculum to the latest technological developments. The accounting department at this school has introduced various technology-based learning methods, although the application of AI in particular is still relatively new and not optimal (Jusmin, 2012). Limited infrastructure and lack of knowledge about AI are major challenges in integrating this technology into everyday learning.

The application of AI at SMKN 1 Boyolali is an interesting topic to learn, considering that teachers and students have various perceptions about the benefits, challenges, and long-term impact of AI on their learning process. Accounting teachers have a key role in introducing and integrating AI technology in the accounting curriculum. Therefore, it is important for them to have a deep understanding of how AI can be used effectively in learning (Aripin, Hadinata, & Kurnia, 2023).

This study aims to identify the perceptions of teachers and students regarding the use of AI in accounting learning at SMKN 1 Boyolali. In particular, this research will explore the benefits, challenges, and abilities of teachers and students in utilizing AI to support the accounting learning process. In addition, this study also aims to analyze the impact of the application of AI on the relationship between teachers and students in accounting learning. It is hoped that the results of this research can enrich the literature on the application of AI

Language Literacy: Journal of Linguistics, Literature, and Language Teaching
Volume 9, Number 1, pp: 152-159, June 2025
e-ISSN: 2580-9962 | p-ISSN: 2580-8672
DOI: https://doi.org/10.30743/ll.v9i1.10765

in accounting education and provide insight for schools and policymakers in designing more innovative learning strategies that are relevant to the latest technological developments (Hanifa, Sholihin, & Ayudya, 2023).

2. Literature Review

Wahyudi (2023) stated that AI helps personalize learning, supports student character development, and improves critical thinking and problem-solving skills. In addition, AI makes it easier to access information and materials, enrich the learning experience, and tailor learning to the individual needs of students. According to (Sari et al., 2022), this technology allows for a more personalized and effective learning experience, where the material is adjusted to the student's ability level and learning style. This not only improves student understanding, but also encourages better learning outcomes by providing the right support at the right time.

According to (Rochmawati, Arya, & Zakariyya, 2023), AI technology in education allows for personalization of learning experiences and automation of administrative tasks. This not only improves the quality of learning by providing a more customized experience for each student, but also improves overall educational efficiency by reducing the administrative burden for teachers. As a result, educators can focus more on teaching, while students get more precise support for their development.

Apriliani, Handayani, & Saputra (2023) explained that AI has been applied in accounting learning through various platforms, such as chatbots that can provide real-time answers to student questions. In addition, AI-based learning applications are also used to assist students in understanding accounting concepts in a more interactive and adaptive way. This technology supports more efficient learning and can be accessed at any time, providing a more immersive learning experience that suits the needs of students. According to (Yunarzat, Sida, & Makassar, 2024), technologies such as ChatGPT facilitate faster and more efficient access to information for students and educators. With the ability to provide instant answers and explain concepts clearly, ChatGPT helps speed up the teaching and learning process, allowing students to get the information they need in a short amount of time and supporting educators in providing more responsive learning materials. Maryani & Sari (2023), stated that previous research focused more on the development of AI-based learning media and training its use to improve accounting learning skills. The main focus of this research is to create tools that can help students understand accounting materials more effectively, as well as provide training to users to maximize the potential of AI technology in supporting learning and practical skills in the field of accounting.

Handayani, Yasin, Nasrul, & Setiawan (2024), highlighting the potential for the development of AI-based accounting models that can increase efficiency in the management of repetitive accounting tasks. This technology can automate routine processes in accounting, such as recording transactions and making financial reports, thereby reducing human error and speeding up work processes. Thus, AI not only improves productivity, but also provides more time for accounting professionals to focus on analysis and more strategic decision-making.

Anwar & Mufidah (2024) mentioned that although the use of AI in education has grown, the use of this technology is still limited to the creation of teaching materials and has not been optimally integrated into the daily learning process. This shows that there is great

potential to further develop AI applications that can support teaching and learning activities more comprehensively, including in interactive teaching and more effective learning evaluation. Al Fadillah, Akbar, & Gusmaneli (2024) explained that the implementation of AI-based adaptive learning systems has helped adapt learning materials to the needs of students and educators. However, the limitations of infrastructure and digital skills are still the main obstacles in its implementation. This shows that while AI technology offers great potential to improve the learning experience, challenges in terms of providing facilities and improving user capabilities need to be overcome to maximize its benefits.

Jusmin (2012) noted that the accounting department in this school has introduced various technology-based learning methods. However, the application of AI in particular is still relatively new and not optimal. This shows that although technology has begun to be applied, the use of AI in accounting teaching is still in its early stages and requires further development so that it can be optimally integrated into the learning process. Aripin, Hadinata, & Kurnia (2023) emphasized that it is important for educators and students to have a deep understanding of how AI can be used effectively in learning. With a good understanding, AI can be optimally utilized to support the teaching and learning process, increase student engagement, and improve overall learning outcomes.

3. Research Method

This research method used a qualitative research approach with a case study design, which aims to describe the perception of teachers and students about the use of artificial intelligence (AI) in accounting learning at SMKN 1 Boyolali. The case study design was chosen because it can deeply explore perceptions related to the use of artificial intelligence (AI) in accounting learning in this specific context, namely at SMKN 1 Boyolali. This research was carried out in October – November 2024 and is located at SMKN 1 Boyolali. The selection of 3 accounting teachers and 3 accounting students as informants in this study is based on several considerations:

Accounting Teacher

- Acting as a facilitator in the use of AI in accounting learning.
- Have experience in integrating AI into teaching methods.
- Act as an evaluator in assessing the effectiveness of using AI for students.

Accounting Students

- Using AI directly in learning activities, so that they have real experience with the advantages and challenges of this technology.
- Choose from different levels of understanding of AI to get a more diverse perspective.

The sample size in qualitative case studies is indeed small, but it is quite adequate because this study aims to explore perceptions in depth, not for statistical generalizations. Case studies focus more on depth of understanding than on the large number of participants.

Data Collection

The data collection process was carried out by interview and observation techniques.

Language Literacy: Journal of Linguistics, Literature, and Language Teaching
Volume 9, Number 1, pp: 152-159, June 2025
e-ISSN: 2580-9962 | p-ISSN: 2580-8672
DOI: https://doi.org/10.30743/ll.v9i1.10765

Interview

Duration : Each interview lasts about 30–45 minutes.

Type : Semi-structured to provide flexibility in digging up additional information.

Sample Questions:

What is your experience in using AI in accounting learning?
What do you think are the main benefits of using AI?
What challenges are faced in implementing AI in the classroom?
To what extent does AI help in understanding accounting material?

Observation

Focus : The use of AI in teacher-student interaction and in assignment completion.

Observed aspects : How students use AI in their assignments, the role of teachers in guiding the use of AI, and how AI affects classroom dynamics.

Documentation : Field notes and analysis of student assignment results.

Trustworthiness

To ensure the validity and reliability of the research, the following strategies are used:

Credibility

Data triangulation: Using interviews, observations, and documentation to verify findings.
Member checking: Ask the informant to review the results of the interview to ensure the accuracy of the interpretation.

Transferability

A detailed contextual description of the research background, participants, and methods used, so that the reader can assess whether the findings can be applied to other contexts.

Dependability

Systematic documentation of the research process to allow the research to be replicated under similar conditions.

Confirmability

Using a trail audit, which is recording research decisions, data analysis, and interpretation justification to ensure that findings are not biased by the researcher's subjectivity. With this approach, the research is expected to provide a valid and reliable picture of the perception of teachers and students towards the use of AI in accounting learning at SMKN 1 Boyolali.

4. Results and Discussion

4.1 Result

Thematic Map: The Potential of AI in Accounting Learning

Theme	Teacher Perception	Student Perception
Benefits of AI	Personalized data analysis, feedback, learning	Interactive simulation, easier access to information
Application	Teaching materials, reference search	Assignments, additional learning

Theme	Teacher Perception	Student Perception
Challenge	Infrastructure, digital literacy	Device gap, internet issues
Implication	Improved pedagogy	Self-learning, real-world application

In the existing literature, AI in accounting learning is often associated with increased efficiency, data analysis accuracy, and personalization of learning. Studies in universities show that AI helps students in analyzing financial statements, data-driven audits and business simulations (Oktavianus, Naibaho, & Rantung, 2023). On the other hand, in vocational environments such as vocational schools, AI plays a greater role in helping understanding basic concepts and practical applications (Niayah, 2024). From the findings in the thematic, there are several harmonies and differences with the existing literature:

Harmony:

- Teachers see AI as a tool to analyse data and provide more personalized feedback, which is in line with research in higher education highlighting AI as an adaptive learning tool. In particular, instructors leverage AI platforms for formative assessments, adjusting content delivery in real-time based on student performance trends—a practice increasingly integrated into university-level accounting curricula.
- Students find AI useful in interactive simulations and information access, which also corresponds to the use of AI in project learning. This reflects a growing trend in both higher and vocational education settings where AI-powered environments simulate real-world business scenarios, enabling learners to engage in role-play accounting tasks, evaluate financial strategies, and make evidence-based decisions.

Further Observations:

- Beyond personalization, the integration of AI fosters independent learning by enabling students to interact with intelligent tutoring systems, which provide instant feedback and scaffolded guidance tailored to individual learning paces. This mirrors university-based findings where such tools improve conceptual understanding and problem-solving capabilities, particularly in cost accounting and financial reporting contexts (Oktavianus et al., 2023).
- In vocational settings, AI is not only a supplementary tool but also an essential part of curriculum modernization. The focus tends to be on hands-on tasks such as automated bookkeeping exercises or AI-assisted error detection in journal entries—practical applications that reinforce foundational skills (Niayah, 2024).
- Additionally, teacher perspectives in both contexts reveal a convergence in attitudes toward AI, acknowledging its role in increasing student engagement and reducing cognitive overload by filtering and summarizing large datasets into digestible insights.

These observations suggest that while the depth and nature of AI integration may vary by educational level, the core benefits—enhanced interactivity, support for differentiated learning, and improved analytical capabilities—are consistently acknowledged across learning environments.

Difference:

Vocational Environment vs. College:

In vocational schools, the primary challenge associated with AI integration lies in infrastructure limitations and device accessibility. Many vocational institutions face

Language Literacy: Journal of Linguistics, Literature, and Language Teaching
Volume 9, Number 1, pp: 152-159, June 2025
e-ISSN: 2580-9962 | p-ISSN: 2580-8672
DOI: https://doi.org/10.30743/ll.v9i1.10765

constraints in terms of internet bandwidth, outdated hardware, and limited access to AI-compatible software, which affects the consistency and quality of AI-enhanced instruction. This differs markedly from universities, which typically have more robust digital ecosystems, IT support, and dedicated resources to facilitate the seamless implementation of AI tools in both instructional and research contexts.

Implications for Learning:

In vocational schools, AI is predominantly leveraged to support independent learning and real-world practical applications. The focus is often on equipping students with the digital competencies necessary for immediate workplace readiness—such as using AI-based accounting software, automating transaction entries, or simulating customer billing scenarios. This hands-on, task-oriented use of AI complements the competency-based models that vocational training often emphasizes (Niayah, 2024).

Conversely, in higher education, AI is frequently integrated into advanced research and analytical tasks, such as forensic accounting, predictive analytics, and complex financial modeling. University students engage with AI tools that support exploratory data analysis, statistical modeling, and deep learning techniques, thereby enhancing their research capabilities and theoretical understanding (Oktavianus, Naibaho, & Rantung, 2023). These tools are often embedded within research seminars, thesis development workshops, and postgraduate coursework, where students are expected to critically analyze large datasets and generate original insights.

Broader Reflections:

While both educational settings recognize the transformative potential of AI, the challenges in vocational education settings underscore deeper issues related to technology readiness, equity of access, and foundational digital literacy. In contrast, higher education institutions tend to focus more on the optimization of AI for specialized academic inquiry and innovation. This dichotomy points to the need for targeted policy interventions: upgrading infrastructure in vocational schools and ensuring that teachers are equipped with both the pedagogical and technical skills to guide AI-enhanced learning effectively.

Overall, although there are overarching similarities in the benefits and pedagogical aims of AI across educational tiers, the context-specific differences in infrastructure, curriculum goals, and learner needs highlight the importance of differentiated strategies for AI adoption. Ensuring equitable access and usage across these environments remains crucial to maximizing AI's educational potential.

5. Conclusion

This research reveals that the application of AI in accounting learning at SMKN 1 Boyolali provides significant benefits, but also faces various challenges. Teachers and students generally have a positive perception of the use of AI, especially in terms of improving learning efficiency, personalizing materials, and accessing information faster and more accurately. However, limited infrastructure, lack of training, and challenges in integrating AI into the curriculum are still the main obstacles to the optimal application of this technology.

Accounting teachers at SMKN 1 Boyolali have an important role in ensuring that AI can be used effectively in the learning process. The use of AI so far is still limited to the

preparation of teaching materials, while the potential use of AI in accounting data analysis, student evaluation, and project-based learning has not been fully utilized. Therefore, further efforts are needed to improve the digital skills of teachers and students to maximize the benefits of this technology. In addition, this study also found that AI has an impact on the relationship between teachers and students, where teachers play a more active role as facilitators and mentors in assisting students to use AI ethically and effectively.

References

Afrita, J. (2023). Peran artificial intelligence dalam meningkatkan efisiensi dan efektifitas sistem pendidikan. *COMSERVA: Jurnal Penelitian Dan Pengabdian Masyarakat*, *2*(12), 3181–3187. https://doi.org/10.59141/comserva.v2i12.731

Al Fadillah, Y., Akbar, A. R., & Gusmaneli (2024). Strategi desain pembelajaran adaptif untuk meningkatkan pengalaman belajar di era digital. *Jurnal Pendidikan Sains dan Teknologi Terapan, 1*(4), 354–362. https://jurnal.kopusindo.com/index.php/jpst/index

Anwar, M. R., & Mufidah, N. (2024). Penggunaan kecerdasan buatan AI dalam pembelajaran mahasiswa kelas peminatan penelitian bahasa Arab. *Journal Alle: Arabic of Language and Linguistics Education, 3*(1), 2985- 3864. https://ejournal.stainh.ac.id/index.php/kafaah

Apriliani, D., Handayani, S. F., & Saputra, I. T. (2023). Implementasi natural language processing (NLP) dalam pengembangan aplikasi chatbot pada SMK YPE Nusantara Slawi. *Techno.Com*, *22*(4), 1037–1047. https://doi.org/10.33633/tc.v22i4.9155

Aripin, S. N., Hadinata, H., & Kurnia, D. (2023). Dampak Akuntansi Manajemen dari Digitalisasi. *ADI Bisnis Digital Interdisiplin Jurnal*, 4(2), 109–115. https://doi.org/10.34306/abdi.v4i2.1040

Fitri, S. A., & Putri, S. F. (2024). Pengembangan video animasi berbasis kecerdasan buatan sebagai media pembelajaran interaktif siswa SMK akuntansi dan keuangan. *Prosiding National Seminar on Accounting, Finance, and Economics (NSAFE)*, *4(4)*, 125–134. http://conference.um.ac.id/index.php/nsafe/article/download/9050/3170

Handayani, T. P., Yasin, A., Nasrul, M., & Setiawan, A. (2024). Pelatihan teknologi kecerdasan buatan untuk peningkatan produktivitas guru SMK DESAIN Komunikasi Visual SMKN 1 Gorontalo. *JICN: Jurnal Intelek Dan Cendikiawan Nusantara*, *1(1)*, 86–93. https://jicnusantara.com/index.php/jicn

Hanifa, Sholihin, A., & Ayudya, F. (2023). Peran AI terhadap industri kreatif di Indonesia. *Jurnal Of Comprehensive Science*, *2*(7), 2159–2170.

Jusmin, E. (2012). Pengaruh latar belakang keluarga, kegiatan praktik di unit produksi sekolah, dan pelaksanaan pembelajaran kewirausahaan terhadap kesiapan berwirausaha siswa SMK di Kabupaten Tanah Bumbu. *Jurnal Pendidikan Teknologi dan Kejuruan*, 21(1). https://doi.org/10.21831/jptk.v21i1.3339

Maryani, M., & Sari, F. (2023). Pengembangan model akuntansi yang berbasis kecerdasan buatan. *All Fields of Science Journal Liaison Academia and Sosiety*, *3*(4), 44–49. https://doi.org/10.58939/afosj-las.v3i4.687

Niayah. (2024). Transformasi pendidikan di era digital: Implementasi AI dan pembelajaran adaptif di SMK Darul Kamal Nw Kembang- Kerang. *Meriva: Jurnal Pendidikan dan Studi Islam, 1*(1), 180-201. https://ejournal.merivamedia.com/index.php/meriva

e-ISSN: 2580-9962 | p-ISSN: 2580-8672
DOI: https://doi.org/10.30743/ll.v9i1.10765

Oktavianus, A. J. E., Naibaho, L., & Rantung, D. A. (2023). Pemanfaatan artificial intelligence pada pembelajaran dan asesmen di era digitalisasi. *Jurnal kridatama sains dan teknologi,* 5(02), 473–486. https://doi.org/10.53863/kst.v5i02.975

Pasyarani, L. (2023). Revitalisasi akuntansi dengan penerapan kecerdasan buatan (artificial intelligence). *Jurnal Ilmu Data*, *3*(2), 1–14. http://ilmudata.org/index.php/ilmudata/article/download/323/308

Rochmawati, D. R., Arya, I., & Zakariyya, A. (2023). Manfaat kecerdasan buatan untuk pendidikan. *Jurnal Teknologi Komputer dan Informatika*, *2*(1), 124–134. https://doi.org/10.59820/tekomin.v2i1.163

Sari, D. E., Narimo, S., Ahmad, N. L., Sarun, A., Jatmika, S., Mustofa, R. H., Baswara, S. Y., & Jannah, M. (2022). Pelatihan pengembangan media pembelajaran berbasis mobile learning application (MLA) di SMK Muhammadiyah 2 Klaten Utara. *Jurnal Abdi Masyarakat Indonesi (JAMSI)*, *2*(2), 545–552. https://doi.org/10.54082/jamsi.225

Wahyudi, T. (2023). Studi kasus pengembangan dan penggunaan artificial intelligence (AI) sebagai penunjang kegiatan masyarakat Indonesia. *Indonesian Journal on Software Engineering (IJSE)*, *9*(1), 28–32. https://ejournal.bsi.ac.id/ejurnal/index.php/ijse

Yunarzat, E., Sida, S. C. N., & Makassar, U. M. (2024). Pengaruh penggunaan chatgpt terhadap motivasi belajar siswa di sekolah menengah kejuruan. *Edukatif: Jurnal Ilmu Pendidikan*, *6*(2), 1607–1626. https://edukatif.org/index.php/edukatif/index

Zendrato, C. P. (2024). Menyikapi perkembangan teknologi AI (chatgpt) sesuai dengan kebenaran alkitabiah. *REI MAI: Jurnal Ilmu Teologi dan Pendidikan Kristen*, *2*(1), 23–37. https://doi.org/10.69748/jrm.v2i1.105