Exploring Teachers' Perceptions of AI-Powered Classroom-Based Assessment Tools in ESP Class

Abstract

The growth of technology in this globalization era has led to the innovation of a digital learning platform called artificial intelligence (AI). Artificial intelligence (AI) was a good innovation for teachers and students, helping them during the teaching and learning activities. Moreover, Artificial intelligence (AI) helped the teachers create interactive material for ESP students, which made it more difficult to find specific materials for ESP classes. This study was conducted by interviewing ESP lecturers who teach ESP classes to university students. This study used the semi-structured interview to explore the teachers' perception of using AI in ESP Course Quizziz, eleven labs, ChatGpt, Google Translate, DeepL translator, Hot Potatoes, TTS maker, Kahoot, Padlet, opexams, and others *as an AI classroom-based assessment tools during the teaching and learning process. This study found that some Artificial Intelligences (AI) were beneficial for the ESP lecturer, which made it easier to make ESP materials, teach the ESP students, and assessed students to check their understanding of the subject. The students were very motivated and more interactive during the learning process.*

Keywords: AI (Artificial Intelligent), Classroom-based Assessment, ESP Course

1. Introduction

The growth of technology can give more innovation in English language teaching and learning. The use of technology in this globalization era can help both teachers and students in the learning process. It can be very helpful for the teachers to give the interactive English learning environment (Gulruh et al., 2020). So that, the students can be more engaged in their learning activity. Moreover, the growth of technology nowadays is not only about the digital platform. The new term of todays technological era namely Artificial Intelligent (AI) make more engaging activity which very helpful for both teachers and students in the language learning process. It is called AI because it is a result of advancements in computers, computer-related technologies, machines, and information communication, enables computers to perform tasks similar to human capabilities, and is widely used in the education sector (Chen et al., 2020). AI in educational sector is not only used in language classroom but for all subject can be very useful. Most teachers and students now used AI to help them creating an engaging material to enhance students motivation in their English learning (Chen et al., 2020; N. J. Kim & Kim, 2022a; Owan et al., 2023). By utilizing these platforms, instructors have been able to efficiently and successfully carry out various administrative tasks, such as assessing and evaluating students' assignments, resulting in improved quality in their teaching endeavours.

In addition, AI can be applied in English language classroom in all English skills. For instance, in Listening skills AI can help the teachers to change the text to voice when the teachers have a difficulties in looking for the audio for teaching the students. Furthermore, in speaking skills also there are some AI that can help both teachers and students to learn English everywhere that is AI Conversational Bot (Chatbot) where the students can practice their speaking skills using voice with robot so that they do not need any speaking partners (Belda-

Medina & Calvo-Ferrer, 2022; Dr. Zafar Ullah, 2023; Han & Lee, 2024; H. S. Kim et al., 2021; Qasem et al., 2023; Shin et al., 2021; Zhang et al., 2023). Therefore, it was very accessible because students can access it everywhere and anytime they want to learn. Another AI that can help students in translating such as google translate, deepL translator, and so on (Polakova & Klimova, 2023). It can help them in looking for the meaning of the words or sentences in another language. Not only in listening and speaking skills, but also AI can be very useful in supporting students to enhance their writing skills which can help them in generating writing idea, correcting the grammatical error, the coherences of the sentence, and be a goodplastform to practice their writing skills in an interactive strategies (Ibrahim, 2023; N. J. Kim & Kim, 2022a). There are so many kind of AI that was very useful for teachers and students in supporting their English learning process.

Moreover, AI also can be used by the teachers to assess the student's English proficiency level and all of English skills that applied in the classroom-based learning process such as in assessing listening by creating audio using text to speech, assessing speaking skills by using AI Chatbot or Voice note, assessing reading, grammar, and writing skills using some kind of apllication which supported by AI such as Quizziz, ChatGpt, and so on (Akiba & Fraboni, 2023; Belda-Medina & Calvo-Ferrer, 2022; Hawanti & Zubaydulloevna, 2023; Ibrahim, 2023; Lim & Yunus, 2021; Lo, 2023; Shaikh et al., 2023). Furthermore, the use of AI for students' assessment is one of the role of AI in educational sector.

In addition, Assesing students' English proficiency was very important to know how the students engaged in their English learning. Then, it can be very helpful for the teachers to know the English level of the students and track the improvement record of the students' English learning process (Miri, 2013). And also, it provides critical information about students' proficiency levels, guiding educators in tailoring instruction to meet individual language learning needs (Frantz et al., 2014). Moreover, by giving the students assessment on their English learning process can give the motivation to the students in improving more their English language. So that, the students can achieve their learning objectives and goals in their English language learning. Therfore, the role of AI in helping teachers to assess students' English proficiency can be used in all English skills to know how the students' level in their English competences (Al Braiki et al., 2020; Owan et al., 2023; Shaikh et al., 2023).

Nevertheles, not all teachers are well-known with AI because the lack of technological skills and not following the growth of technology. It was happened in rural area where difficult to get technology enhancement because having low signal and no internet connections (N. J. Kim & Kim, 2022b). Moreover, Some teachers did not want to learn more about AI because they found some difficulties in applying AI to their classroom activity. This issues was mostly happened at school especially when the school admission not supporting or facilitating the teachers to use AI in their classroom activities. Not only that, but also some teachers feel more comfortable with the kind of traditional assessment that they had engaged with it in long time ago.

On the other hand, if looked back at the pandemic era when all of the educational institution close and change the learning process through online learning it means that all of teacher must be used digital platform to help them creating engaging learning classroom environment, making learning materials, and others. It was also happened in English learning assessment where in listening and speaking skills students must be having more practice while if online by using zoom or another digital platform, it was limited to have engaging speaking activity during the learning process (Dolzhich et al., 2021; Maulidyah, 2021.). That is why AI can be beneficial for the teachers to create an interactive learning activity and assessing students' English skills (Al Braiki et al., 2020; Moura & Carvalho, 2024a; Owan et al., 2023).

Therefore, it can help in assessing students' English skills to know the learning track of the students improvement on their English learning.

This study focused on the implementation of AI-powered in Classroom-based assessment in English language teaching and learning process which focused on ESP class. This study focused on how the teachers manage their ESP class, making English materials for ESP, and also applying AI based in ESP Classroom activity. Furthermore, this study following the previous studies which have the same focused on the used of AI in English classroom for Assessment tools (Al Braiki et al., 2020; Owan et al., 2023). Therefore, the previous study stated that AI was very helpful for English learning activity which gave the engaging learning process for the students so that the students gained more motivation in learning English. The significances of this study to know how the teachers implement AI in their ESP classroom activity to bring an interactive learning for ESP students.

Some previous research still focus only on the used of digital platforms such as youtube, games, and other websites where they was still not had AI features (Maziriri et al., 2020; Rizkiyah, 2017; Tiara Putri Utomo & Ahsanah, n.d.). Moreover, some previous study also still focused on classroom-based assessment in traditional way such as using flashcards (Baleghizadeh, 2011). It was still limited to focus on ESP classroom where most ESP students need more engagement in their English learning process for their specific purpose which means they needs more practice on their English language skills based on their purpose because most research focused on Efl students (Frantz et al., 2014; Hwang et al., 2022; H. S. Kim et al., 2021; Xiao & Zhi, 2023).

Summarizing the crucial issues which mostly happened in English language classroom in using many kinds of assessment tool to assess students' English proficiency, the aims of this study is to know the teachers' perceptions on the used of AI in assessing ESP students' in their English language teaching and learning.

2. Method

This study used qualitative research that focused on descriptive qualitative to know how the teachers perceptions of using AI in their English classroom activities and the implementation of AI helped the teacher create engaging materials to assess the students' English language skills in ESP class. This study was conducted in a semi-structured interview among five lecturers in ESP Class to know their perceptions on the use of AI-powered classroom-based assessment in ESP Class. The data was analyzed using descriptive-qualitative methods to understand the themes and patterns that emerged from the teachers' responses about the lecturers' perception and implementation of AI in ESP Classroom-based assessment during the teaching and learning process.

3. Findings and Discussions

The result of the study showed that all of the ESP lectures implemented AI, both creating ESP materials, teaching the ESP students in the class, and assessing students. The AI used in the lectures the most were Quizziz, eleven labs, ChatGpt, Google Translate, DeepL translator, Hot Potatoes, TTS maker, Kahoot, Padlet, opexams, and so on. All of the lecturers said that using AI to create ESP materials and teach the students was very helpful in engaging in an interactive activity in the ESP classroom because it did not make the students get bored during the learning activities. Therefore, it made it more accessible for them to build students' motivation to learn English language. All of them used AI a long time ago, especially since the COVID-19 pandemic began.

In addition, in making ESP materials, some AI such as Quizziz, eleven labs, ChatGpt, Google Translate, DeepL translator, Hot Potatoes, TTS maker, Kahoot, Padlet, opexams, and so on were beneficial for all lectures because it can make it easier to find and make ESP materials, especially in listening and reading skills, which took much work to find suitable material based on the major of ESP students. That was why AI was beneficial for all lectures in making ESP materials. Furthermore, it can manage the time to be more efficient in making the material and assessing the students because some AIs use automated scoring techniques such as quizzes, Kahoot, and others. However, when the lecturer gave reading or writing assessments which used essay or comprehension answers, they corrected manually as the rubric they made.

> *"Using AI was very helpful for me in creating interactive ESP materials which mostly difficult to find it in google and it make my time be more efficient than I make it manually. However, I was still checking and correcting again after I made it using AI." (L2, L3)*
> *"AI can help me to be effieciently and easily in making ESP materials especially in listening and reading which was difficult to find the materials such as in Law, Agriculture, Aquaculture, and other majors which not commonly using English on it." (L1, L4, L5)*

Moreover, before teaching and assessing ESP classrooms, the lecturers briefly explained how to use AI in classroom activities and students' assessment tests. It was because only some of the students were familiar with the kind of AI used by the lecturer. Therefore, after explaining to the students how to use AI, the lecturer gave an example of how to use it before the students started to use it so that the students could understand how to use AI in their classroom learning activity.

> *"Of course, at the first I used AI to teach them, I gave the way how to use it before the students practiced. Then, I gave them the example how to use it to give more knowledge to the students on using that kind of AI" (L1, L2, L3, L4, L5)*

In addition, all of the lecturers said that they used AI in making ESP materials, teaching the students, and assessing the students, which helped the students gain an understanding of their learning process. It can be seen in their learning progress day by day and the scoring result of their assessment. The students looked more engaged in learning English during the class and doing the assessment given by the lecturer. Therefore, the students looked more motivated in their learning process and did not get bored during the class activity.

> *"The students' progress increased when I taught them using AI because it created interactive learning environment in this digital era. So that the learning process was not monotonous and boring for the students especially in the afternoon class where most of them were sleepy." (L1, L2, L3)*
> *"When I teach my students using AI, they looked very motivated and interactive in their learning process because AI give them new innovation in learning language to be more creative and interactive so that they cannot get bored during the class." (L4)*
> *"Students were very interactive on their learning especially in using AI and the result of it they get more motivation in learning English. It can be proven*

by their asssessment record before and after I applied AI in the classroom"
(L5)

Nevertheless, using AI for teaching and assessing students did not mean that there was no challenge in the application of AI in the ESP classroom activity. All lecturers said that applying AI during the assessment, for instance, using quizzes to assess students' learning, was not easy because some of the students needed help with their internet connection and signal. Also, it was because of the use of different handphones, such as Android and iPhone, which have different features. So, sometimes, students who use iPhones need help to access Quizziz. However, the challenge was not crucial because it was still the most common problem that happened when using digital platforms such as AI.

> *"Sometimes, the most challenge faced by the students in using AI was only because of the signal, internet connection, and different features between android and Iphone which made them can not link to the quizziz and other AI" (L1, L2)*

On the other hand, the role of AI in creating ESP materials, teaching the students, and assessing the students both in the classroom and online was very helpful and engaging to both lecturers and students. All lecturers said that AI could be an excellent alternative to making paperless assessments of students and making the scoring technique efficient. Therefore, the student's progress increased before the lecturer applied AI in the ESP classroom activity.

> *"I think AI was very helpful for me in scoring the students because I did not need to scoring them manually but I can use automated scoring technique by AI, even though I need to check it a little bit but it can manage my time than I did it manually." (L3, L4)*

> *"AI in educational setting was very engaging and helpful for both lecturers and students because by using it we can made a paperless for the classroom activity and assessment. Then, the scoring technique also easier." (L1, L2, L5)*

According to the statements of all lecturers, AI will be more helpful in educational settings, which can help educators make interactive classroom activities and assess students. Based on the lecturers's experiences with using AI, the classroom activity was not only interactive but also motivated the students to learn English. Furthermore, in the future, AI can manage the time educators spend making and assessing students both in the classroom or online class.

> *"The growth of the technology in education was massive especially AI. So that, in the future will be so many kind of AI that can be very helpful for the educators to create more interactive materials and assessment for the students" (L4)*

However, some lecturers said that even when they used AI in assessing students, they were still correcting and checking again a little bit to make sure that the scoring technique was correct. Therefore, lecturers said that they still needed to be creative in teaching the students because when using AI, the lecturer also needed to think about how to use these kinds of AI to be interactive learning for the students. Then, found a suitable AI to make the materials and assess the students in the classroom.

> *"Even though I used AI, it did not means that I was not be a creative lecturer in teaching the students because in using AI We as lecturer should be understand how to use the AI in the interactive way, how to manage the AI well for the students, and also thinking about how to manage the assessment techniqu using AI so the students did not cheating in the class" (L1)*

To grasp the result of the interview with all five Esp lecturers, the role of AI in the educational setting was crucial for both teachers and students. Because of using AI, the classroom environment during the learning process can be more interactive and creative, and also motivates the students to learn English. Moreover, many kinds of AI nowadays can help the teacher in making materials for ESP students, which was very difficult to find on Google and some websites because of the limitation of ESP materials, especially for students who are majoring in law, agriculture, aquaculture, and so on.

The role of AI was beneficial for the teachers in exploring and elaborating on ESP materials, especially for listening and reading. The lecturers use many kinds of AI according to the result of the interview, such as eleven labs for creating listening materials, quizzes for assessing students, exams for creating assessments, AI Chatbots for speaking practice, and others. Overall, the teachers' perceptions of the use of AI in classroom-based assessment tools were very engaging and interactive. All of them said that AI was beneficial for them, not only in making the ESP materials but also in teaching and assessing students, especially in correcting the students' scores using the automated correcting techniques in AI they used. Because it can make their time to correct students' assessments more efficient than before using AI. Furthermore, they can use a paperless technique to assess students using AI. The result of the study was in line with the previous study conducted by (Akiba & Fraboni, 2023; Al Braiki et al., 2020; Chaudhry & Kazim, 2022; Gocen & Aydemir, 2020; Ibrahim, 2023; N. J. Kim & Kim, 2022b; Lim & Yunus, 2021; Moura & Carvalho, 2024).

Despite the role of AI that can be beneficial for teachers, it also some challenges in implementing AI for students, such as the internet connection, phone signal, and the different features of the students' phones. These challenges can create barriers for students to access and utilize AI technology effectively in their learning. In addition, there may be concerns about privacy and security when using AI in educational settings. Educators need to address these challenges and concerns in order to harness the potential benefits of AI in the classroom fully. This was in line with the previous study conducted by (Akiba & Fraboni, 2023; Elliott & Soifer, 2022; Moura & Carvalho, 2024). It suggested that English teachers should be more skilful in the use of AI in this technological era, especially in assessing students' learning progress and creating more interactive classroom activities using AI as part of the growth of the technology in the future. This is because the growth of technology in the future will increase, especially in artificial intelligence (AI). It will be an AI that teachers can explore to help them in the teaching process and be more creative teachers in the future to create more engaging classroom activities, especially for ESP students. It was because the Indonesian curriculum for vocational schools and university students was limited in focusing on English learning for specific purposes. Therefore, the subsequent study can be more significant in exploring the use of AI in creating interactive English materials, especially English for specific purposes (ESP).

4. Conclusion and suggestion

In conclusion, the use of AI in educational settings, especially for university students, can be a good alternative in this technological era, especially for ESP teachers who mostly find difficulties in creating ESP materials for teaching and assessing ESP students with the specific major because of the limitation of it. However, the teachers' perceptions of the use of

AI in their classroom activity and assessment were beneficial for them, especially when assessing students and correcting the students' scores, where AI made it easier by giving automated scoring techniques. So the teachers can be more efficient in correcting the students' assessment tests. Even though, in writing and speaking, sometimes the teachers still need to correct it manually as the rubric was made because AI did not cover all of the assessment rubrics. Therefore, AI, such as Chatgpt, Chatbot, Opexams, and Elevenlabs, can give the teacher an easy way to create materials and assessments for the students in all English skills. However, this study also has several limitations. First, the small number of participants for future research can be used for a higher number of participants with different background knowledge and educational areas. Second, this study was focused on more than just the use of AI in general, not on specific AI from the researcher mentioned above. Then, this study focused only on the teachers' perception rather than on the students. So that future studies can explore both teachers' and students' perceptions of the use of AI in ESP classroom activity, which uses the specific AI applied by the teachers in the classroom.

References

Akiba, D., & Fraboni, M. C. (2023). AI-Supported Academic Advising: Exploring ChatGPT's Current State and Future Potential toward Student Empowerment. *Education Sciences, 13*(9). https://doi.org/10.3390/educsci13090885

Al Braiki, B., Harous, S., Zaki, N., & Alnajjar, F. (2020). Artificial intelligence in education and assessment methods. *Bulletin of Electrical Engineering and Informatics, 9*(5), 1998–2007. https://doi.org/10.11591/eei.v9i5.1984

Baleghizadeh, S. (2011). The impact of two instructional techniques on EFL learners' vocabulary knowledge: Flash cards versus word lists. *MEXTESOL Journal, 35*(2).

Belda-Medina, J., & Calvo-Ferrer, J. R. (2022). Using chatbots as AI conversational partners in language learning. *Applied Sciences (Switzerland, 12*(17). https://doi.org/10.3390/app12178427

Chaudhry, M. A., & Kazim, E. (2022). Artificial Intelligence in Education (AIEd): A high-level academic and industry note 2021. *AI and Ethics, 2*(1), 157–165. https://doi.org/10.1007/s43681-021-00074-z

Chen, L., Chen, P., & Lin, Z. (2020). Artificial intelligence in education: A review. *IEEE Access, 8*, 75264–75278. https://doi.org/10.1109/ACCESS.2020.2988510

Dolzhich, E., Dmitrichenkova, S., & Ibrahim, M. K. (2021). Using M-learning technology in teaching foreign languages: A panacea during the COVID-19 pandemic era. *International Journal of Interactive Mobile Technologies, 15*(15), 20–34. https://doi.org/10.3991/ijim.v15i15.22895

Dr. Zafar Ullah, Dr. S. U. M. N. K. M. M. A. (2023). Measuring efficacy of speaking English chatbot NUMLINA: A user study. *Al-Qanṭara, 9*(4), 369–387.

Elliott, D., & Soifer, E. (2022). AI technologies, privacy, and security. *Frontiers in Artificial Intelligence, 5*. https://doi.org/10.3389/frai.2022.826737

Frantz, R. S., Bailey, A. L., Starr, L., & Perea, L. (2014). Measuring academic language proficiency in school-age English language proficiency assessments under new college and career readiness standards in the United States. *Language Assessment Quarterly, 11*(4), 432–457. https://doi.org/10.1080/15434303.2014.959123

Gocen, A., & Aydemir, F. (2020). Artificial intelligence in education and schools. *Research on Education and Media, 12*(1), 13–21. https://doi.org/10.2478/rem-2020-0003

Gulruh, N., Dildora, S., Bunyod, B., & Fazliddin, Y. (n.d.). *Interactive learning environment in the English language teaching with the help of computer technology*. Solid State Technology. www.solidstatetechnology.us

Han, J., & Lee, D. (2024). Research on the development of principles for designing elementary English speaking lessons using artificial intelligence chatbots. *Humanities and Social Sciences Communications, 11*(1). https://doi.org/10.1057/s41599-024-02646-w

Hawanti, S., & Zubaydulloevna, K. M. (2023). AI chatbot-based learning: Alleviating students' anxiety in English writing classroom. *Bulletin of Social Informatics Theory and Application, 7*(2), 182–192. https://doi.org/10.31763/businta.v7i2.659

Hwang, W. Y., Guo, B. C., Hoang, A., Chang, C. C., & Wu, N. T. (2022). Facilitating authentic contextual EFL speaking and conversation with smart mechanisms and investigating its influence on learning achievements. *Computer Assisted Language Learning*. https://doi.org/10.1080/09588221.2022.2095406

Ibrahim, K. (2023). Using AI-based detectors to control AI-assisted plagiarism in ESL writing: "The Terminator Versus the Machines." *Language Testing in Asia, 13*(1). https://doi.org/10.1186/s40468-023-00260-2

Kim, H. S., Cha, Y., & Kim, N. Y. (2021). Effects of AI chatbots on EFL students' communication skills. *Korean Journal of English Language and Linguistics, 2021*(21), 712–734. https://doi.org/10.15738/kjell.21..202108.712

Kim, N. J., & Kim, M. K. (2022). Teacher's perceptions of using an artificial intelligence-based educational tool for scientific writing. *Frontiers in Education, 7*. https://doi.org/10.3389/feduc.2022.755914

Lim, T. M., & Yunus, M. M. (2021). Teachers' perception towards the use of Quizizz in the teaching and learning of English: A systematic review. *Sustainability (Switzerland, 13*(11). https://doi.org/10.3390/su13116436

Lo, C. K. (2023). What is the impact of ChatGPT on education? A rapid review of the literature. *Education Sciences, 13*(4). https://doi.org/10.3390/educsci13040410

Maulidyah, D. (n.d.). Students' perception on the use of English subtitle on Zoom during online learning process. *JELLT (Journal of English Language and Language Teaching, 5*(2).

Maziriri, E. T., Gapa, P., & Chuchu, T. (2020). Student perceptions towards the use of YouTube as an educational tool for learning and tutorials. *International Journal of Instruction, 13*(2), 119–138. https://doi.org/10.29333/iji.2020.1329a

Miri, M. (2013). Contributory role of collaborative assessment in improving critical thinking and writing. International Journal of Applied Linguistics & English Literature, 3(1), 1–11. https://doi.org/10.7575/aiac.ijalel.v.3n.1p.1

Moura, A., & Carvalho, A. A. A. (2024). Teachers' perceptions of the use of artificial intelligence in the classroom (pp. 140–150). https://doi.org/10.2991/978-94-6463-380-1_13

Owan, V. J., Abang, K. B., Idika, D. O., Etta, E. O., & Bassey, B. A. (2023). Exploring the potential of artificial intelligence tools in educational measurement and assessment. Eurasia Journal of Mathematics, Science and Technology Education, 19(8). Modestum LTD. https://doi.org/10.29333/ejmste/13428

Polakova, P., & Klimova, B. (2023). Using DeepL translator in learning English as an applied foreign language – An empirical pilot study. Heliyon, 9(8). https://doi.org/10.1016/j.heliyon.2023.e18595

Qasem, F., Ghaleb, M., Mahdi, H. S., Al Khateeb, A., & Al Fadda, H. (2023). Dialog chatbot as an interactive online tool in enhancing ESP vocabulary learning. Saudi Journal of Language Studies, 3(2), 76–86. https://doi.org/10.1108/sjls-10-2022-0072

Rizkiyah, F. N. (2017). Improving students' ability in writing hortatory exposition texts by using the process-genre based approach with YouTube videos as the media (Vol. 2, Issue 1).

Shaikh, S., Yayilgan, S. Y., Klimova, B., & Pikhart, M. (2023). Assessing the usability of ChatGPT for formal English language learning. European Journal of Investigation in Health, Psychology and Education, 13(9), 1937–1960. https://doi.org/10.3390/ejihpe13090140

Shin, D., Kim, H., Lee, J. H., & Yang, H. (2021). Exploring the use of an artificial intelligence chatbot as second language conversation partners. Korean Journal of English Language and Linguistics, 2021(21), 375–391. https://doi.org/10.15738/kjell.21..202104.375

Tiara Putri Utomo, D., & Ahsanah, F. (n.d.). Utilizing digital comics in college students' grammar class. Journal of English Language Teaching and Linguistics, 5(3). www.jeltl.org

Xiao, Y., & Zhi, Y. (2023). An exploratory study of EFL learners' use of ChatGPT for language learning tasks: Experience and perceptions. Languages, 8(3), 212. https://doi.org/10.3390/languages8030212

Zhang, R., Zou, D., & Cheng, G. (2023). Chatbot-based learning of logical fallacies in EFL writing: Perceived effectiveness in improving target knowledge and learner motivation. Interactive Learning Environments. https://doi.org/10.1080/10494820.2023.2220374