

Students' Perception toward Chat PDF AI Applied in Critical Reading Course

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Abstract

Critical reading skills are central to academic achievement since they afford students one capacity to decipher and evaluate texts efficiently. With the entering of Artificial Intelligence (AI) in the education system, new tools have been developed to help in this process, one of which is Chat PDF AI. This qualitative research focuses on the Students at the English Education Department Dwijendra University and their understanding of critical reading courses with the help of Chat PDF AI. The objectives of this study are: to assess the indications of Chat PDF AI on students' attitude, motivation, and comprehension in critical reading. To achieve the following objectives, a mixed-methods, sequential, explanatory design as highlighted by Creswell, was used. 15 students participated in the study and questionnaires involving structured interviews were used to gather data. The numerical data collected from the questionnaires were computed using descriptive statistics to compare the results for the different variables while the interviews offered more information about the students' experience and perception regarding the implementation of the ergonomic computer workstations. The findings show that most of the students had a positive perception of chat PDF AI. In detail, 86,7% respondents talked about the improvement in the attitude towards the critical reading because of utilizing the tool; 66,7% respondents stated about their increased motivation as the tool is interactive. According to the qualitative data, the interviewees asserted and supported these discoveries by explaining that Chat PDF AI enhanced the entertaining and interactive attributes of reading tasks, thus making them less monotonous while enabling students to interact in a more productive manner in the learning process. Therefore, Chat PDF AI can be regarded as beneficial in the educational process both impacting the students' attitudes and their motivation towards critical reading. Thus, although the study's results appear positive, further research using more significant and diverse groups of participants is required to replicate these outcomes and examine AI tools' sustained effects on the learners' performances and critical reading skills.

Keywords: Chat Pdf AI, Critical Reading, Innovation of technology, Perception

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1. Introduction

The skill to read is quite important and it enables people to get into a book and come out with interpretation of events. It focuses and analyses and assesses the contents of a text and it also insist on taking into account the perspective of the author of the text along with assessing the arguments and proofs offered for the propositions (Rojalai et al., 2021). The components of critical reading include: understanding of the major concepts, defining the reason of writing by the author, evaluating the reliability of the points presented, and linking the text to the courses or actual life (Rini, 2018). Critical reading skills help persons understand the contents with the degree impossible while modifying individual biases (Mohseni Takaloo & Ahmadi, 2017). This ability is useful when regarding the scholarly, occupational, and personal sphere as it results in (Al Roomy, 2022).

When it comes to areas of instruction that embrace new technologies in education, teaching of reading skills has probably been one of the most impacted despite the little influence it has received. Transition from a more traditional approach of employing more printed texts into using more digital texts in the teaching learning process entails the teacher to transform their teaching strategies and techniques so that they can first acquire mastery of how to employ the use of digital texts with the learners (Remizantseva & Ablyazov, 2019). They have defined skills in reading more and more as the interpretation of web sites, video presentations and on-line articles and the ability to decipher and understand the writing (Murray et al., 2022). This transition also involves imparting the communication skills, information literacy, media literacy, and digital literacy to enable the students grasp these texts appropriately. However, in view of these technological features the readers also have the privileges of multimedia and individualistic reading.

Besides, the practice of employing artificial intelligence in learning English demonstrates certain tendencies explored in terms of its impact on students' motivation, flexibility of the learning process, and possibilities for differentiated learning environment (Moybeka, 2023). The fact that the English lessons and the practice material are accessible through the artificial intelligence such as chatbots and intelligent tutoring systems have enabled the learners to advance through the English lessons without being bound by class hours (AbuSahyon, 2023). To sum up, the usage of strategies that trust AI and NLP when enhancing English teaching and learning, enables the increase in the transformation of methodology. The application of Artificial Intelligence to support the learning of English as a foreign language covers intelligent listening training, error correction, post class consultation, and cloud translation teaching and learning model that offers efficient and diversified educational service programs (Sheng, 2023).

The integration of AI in critical reading is a quite dynamic and challenging process. As a technology, literacy is regarded as defining the practices and identity, and premised on how people approach texts (Leander & Burriss, 2020). AI concepts provide unique modes of addressing the social institutions that reflect on society's values ingrained in the systems (Pereira & Moreschi, 2019). Furthermore, AI is applied in a range of contexts such as healthcare and education; it improves the readers' performance and productivity (Ahn et al., 2022; Radanliev et al., 2021). Holding on critical literacy theories, the concept of AI is altering the theories of literacy practices which calls for the cultivation of acceptable AI literacy in the society (Bearman & Ajjawi, 2023). This means students are being prepared to read AI technologies actively and refashion sociotechnical systems (Tanksley, 2024). In sum, the application of AI in critical reading goes beyond text comprehension assuming the secondary role for preparing people for engaging with text in the technologically advanced world. Furthermore, there are some applications and tools have been designed and developed to train the critical reading skill with the specific micro-interaction with PDF documents applying AI. The applications which are cited above are LangChain Infrastructure with ChatGPT, Ally, Bing AI, Chameleon, Langsmith, ATLAS Chat PDF, etc. They all show how AI can be integrated with PDF documents and prove how it can enhance PDF documents' accessibility, efficiency, and interaction.

Furthermore, the present study investigated learners' perceptions regarding the AI techniques employed in ELT with a huge array of scholars' investigation on this particular area as well. Various studies on this area presented students' attitudes to AI incorporation in language learning. These two applied that perception can also shape how people consider ideas like success, self, and even hate and love or other social constructs regarding the society (McCauley, 2020). Hazaymeh's study from 2024 unveils that EFL teachers had an overall constructive disposition towards AI-based language learning technologies and how AI can enhance learning EFL classes (Hazaymeh, 2024). This favourable opinion was supported by

the research of Moulieswaran & Kumar N S (2023), where the author found out that the ESL students' perception of, AI based technologies were mainly positive especially where learning English was concerned (Moulieswaran & Kumar N S, 2023). Moreover, Muslimin's study in 2024 elicits vital information concerning the impact of Cami AI on the attitude and accomplishment trajectory of EFL students. The qualitative and quantitative approach of this study generated outcomes on the usefulness of AI applications in EFL composing instruction, in addition to the percent enhance in academic performance among the students (Muslimin, 2024). As highlighted by Sumakul et al. (2022) the EFL students have good impressions about the AI technology used in learning process, which corporate with the generally reported positive findings of the attitudes of students towards AI in education. The other study conducted by Lee (2024) looked at Korean university students' perceptions of AI for writing assistance, which can comprise generative AI tools, including Grammarly and apps that employed machine learning such as Google Translate. This research contributed to the existing understanding of students' engagement with multiple forms of AI in writing classes for ELL students. A rather broader perspective regarding the attitude of the students as to the role of the technology in language learning is provided by Dewi (2024) assessing students' perceptions of the web based and non-web based ICT incorporation in ELT that not only includes the students' perception towards specific technologies but also involved factors such as learning difficulties/challenges and ease of mastering the subject. However, Sharadgah and Sa'Di's systematic study offered an adequate review of the state of literature on the research on the adoption of AI for English language teaching and learning. The review highlighted the possibilities of enhancing a range of aspects linked to English and student experiences by utilizing AI (Sharadgah & Sa'di, 2022). From a more encompassing, positive perspective which presented the overall advantages of integration of AI in ELT, specific outcomes were supported and contextualized by the existing studies. Furthermore, Kemelbekova, in her work with reference from 2024, focused on the interaction of AI chatbots with the speaking skill of the students in EFL classes, hence giving information on the role of AI in enhancing language skills. The findings of this study enabled me to describe the useful effects of incorporating AI into LLEs (Kemelbekova, 2024). Further, with regards to the potential offered by the application of specific AI tools and the development of language competences, Duong (2024) conducted a survey on the use of an AI voice chatbot for enhancing the fluency of the English language usage of Vietnamese undergraduate students. These studies indicate a general tendency of students' positive attitudes toward the use of AI in ELT.

Based on the presented research in the area of English language teaching and learning, AI can thus improve speaking, reading, and the learning of language as well as the process of learning in general. The lawmakers and instructors who are seeking to adopt the technology to enhance teaching techniques, and enhance the learners' efficiency should look into the learners' attitude towards AI in learning languages. In this study, the researchers are intended to examine how the students perceive one of the AI tool adopted in Critical Reading Course. The specific AI tool is called Chat PDF AI. Chat PDF AI is the comfortable and effective tool for interacting with Pdf documents, that works with the base of artificial intelligence (Huynh-The et al., 2023). Yet, there is no study that focuses deliberative on students' perception of the utilization of the Chat PDF. Besides, this research also seeks to establish the students' attitude towards the Chat PDF AI applied to the Critical Reading Course.

2. Method

The finding provides the summary of the synthesis based on the results of the questionnaire and interview, which contained detailed information about students' perceptions

of using the Chat PDF AI in critical reading course. The findings are categorized into three main themes: The three categories of students' perception which are; Ease of use and Accessibility, Efficiency in Learning, and Affective Factors.

Ease of Use and Accessibility

The survey of the Chat PDF AI in the critical reading course indicates that the tool is valued for the ability to be simple and freely available. Overall, eight students reported no difficulties in using the application, and hence no hindrances to its use were observed. Nonetheless, incorporating the integration into course content was seamless, thus improving the general user experience. It was reported that a few of the students had some problems with the particular aspects and the process of logging in; nevertheless, the common majority found the tool rather simple and easy to navigate, and this ultimately made it easy for them to use for their engagement purposes.

Table 1. Students' perception about the practicability of Chat Pdf in critical reading course

Statements	Agree	Strongly Agree
Chat PDF AI is easy to use.	2 (13.3%)	13 (86.7%)
I can easily access Chat PDF AI whenever I need it.	4 (26.7%)	11 (73.3%)
Chat PDF AI integrates well with the course materials	5 (33.3%)	10 (66.7%)
The user interface of Chat PDF AI is intuitive and user-friendly	3 (20%)	12 (80%)

The results of the questionnaire indicate that most students considered Chat PDF AI to be user-friendly and readily accessible. More precisely, 86.7% of the participants expressed strong agreement on the ease of use of the program, while 73.3% strongly agreed that they could access it at any time they need. In addition, a significant majority of 66.7% expressed strong agreement about the seamless integration of the app with course materials. Furthermore, a substantial 80% of users deemed the user interface to be straightforward and easy to navigate.

The interviews confirmed these positive sentiments. For instance, Respondent 1 characterized their experience as "relatively effortless and pleasurable," commending the user-friendly design and smooth incorporation of course elements. She stated that her initial encounter with Chat PDF AI was straightforward and pleasurable. The interface was user-friendly and I quickly grasped its functionality without encountering significant challenges. Nevertheless, certain students, like Respondent 2, encountered initial challenges with the functionality and the login procedure, leading to occasional feelings of frustration. He stated, "My initial experience with Chat PDF AI was somewhat intricate." The design is inherently straightforward, yet there are several functions that lack clarity regarding their usage. Similar to Respondent 3, they confirmed that the application was easy to use, although there were certain challenges noted during the first login into the software. She stated that her first encounter with Chat PDF AI was exceptionally effortless: "It is quite easy the way the method is implemented because I was in a position to grasp it in a short span of time."

Effectiveness in Learning

AI of Chat PDF is accredited to facilitate the enhancement of the learning of students in the context of the critical reading course. They concluded by noting that the tool has a long way in aiding students to make better understanding of the texts and improves their critical thinking skills. It assists every learner in making some form of sense with regards to the questions that he/she may have in his/ her mind concerning the texts read. The level of satisfaction was reported to be high among the students regarding Chat PDF AI in the context of learning, while some of the users felt that sometimes it is undesirable to make the

explanations too elaborate. As for the perceived usefulness, the application is recognized as a tool contributing to academic improvement.

Table 2. Students' perception about the effectiveness of Chat Pdf in critical reading course

Statements	Agree	Strongly Agree
Chat PDF AI helps me better understand the text	5 (33.3%)	10 (66.7%)
Using Chat PDF AI has improved my critical thinking skills	4 (26.7%)	11 (73.3%)
Chat PDF AI effectively answers my questions about the readings.	2 (13.3%)	1 (80%)
Chat PDF AI enhances my overall learning experience in the course	6 (40%)	9 (60%)

The results of the questionnaire suggest that students generally regarded Chat PDF AI as effective in improving their educational experience. A substantial 66.7% of respondents firmly concurred that it enhanced their comprehension of texts, while 73.3% believed that it enhanced their critical thinking abilities. Furthermore, 80% of respondents expressed their firm agreement that the application effectively addressed their inquiries regarding the readings, while 60% believed that it improved their overall learning experience.

Actual interview responses given by the participants also supported these perceptions. As for the specificity of the use of the application Respondent 1 indicated that the Chat PDF AI was helpful specifically for comprehending texts and honing critical thinking due to thorough descriptions. When asked to provide feedback on her experience, she stated, "Indeed, I have derived advantages from Chat PDF AI, particularly when I encounter a challenging text like an academic article. Chat PDF AI helps me comprehend unfamiliar terms, enabling me to read more quickly." However, Respondent 2 expressed dissatisfaction with the Chat PDF AI app, stating that it frequently presented him with verbose explanations that were discouraging. He stated, "Not particularly beneficial." Occasionally, the explanations provided are overly detailed, leading to confusion rather than providing assistance. Respondent 3 reiterated the good response, expressing agreement by saying, "Yes, indeed! When seeing a challenging article, I found Chat PDF AI to be helpful in providing explanations for unfamiliar terminology."

Impact on Affective Factors

In this regard, the positive aspect that is obtained in the case of Chat PDF AI is in regards to the attitude of the students towards Critical reading. Proper attitude is cultivated, motivation is boosted, and in turn, reading procedures are changed into more fun and exciting sessions. This was evidenced when the students were required to describe their impression of the application; the data highlighted that the encounter with the given application enhanced the learning experience and made it more exciting and enthusiastic as compared with other learning activities. Like most teaching and learning resources, there were areas of challenge that some students pointed out but at the same time students perceived that the tool can help make the entire process of critical reading related activities more fun.

Table 3. Students' perception about the impact of Chat Pdf on students' affective domain in critical reading

Statements	Disagree	Agree	Strongly Agree
Chat PDF AI fosters a positive attitude towards critical reading	0 (0%)	2 (13.3%)	13 (86.7%)
Using Chat PDF AI increases my motivation to engage with the reading materials	1 (6.7%)	4 (26.7%)	10 (66.7%)

Chat PDF AI makes the reading assignments more interesting.	1 (6.7%)	2 (13.3%)	1 (80%)
My experience using Chat PDF AI has been enjoyable	0 (0%)	3 (20%)	12 (80%)

The survey findings indicated that the implementation of Chat PDF AI had a beneficial influence on students' perspectives regarding critical reading. A significant majority of 86.7% expressed strong agreement that the app promoted a good attitude, while 66.7% reported an increase in their motivation to interact with reading content. Moreover, a significant majority of 80% expressed a strong agreement that their interaction with the application was pleasurable.

According to the interview analysis, the study also highlighted an improvement in interest and positive attitude towards critical reading as pointed out by Respondent 1 with Chat PDF AI as the tool used. She said, "Chat PDF AI has made me more interested and positive towards critical reading activities because it makes reading to be more fun." But, Respondent 2 noted that the app made him less inclined to engage in critical reading because explanations were often confusing. She said, "It makes me lazy. Instead of getting excited, sometimes I feel like the reading task is harder." At the same time, the case was opposite with Respondent 3, who observed that the app was fun and inspiring because some of the features, such as clarifying the meaning of the difficult words, were helpful. Regarding the software, she said, "Chat PDF AI makes me more excited to read critically. It makes it more fun."

By incorporating of Chat PDF AI in the critical reading course, it has been shown that it has enhanced the students' learning experience in a notable way. This discussion draws conclusions from the analysis of data gathered in the survey questionnaire and the in-depth interviews taking into consideration the literature relevant for the pursued theoretical frameworks. Accordingly, the survey established that the key aspect of Chat PDF AI was easier to use and accessible to the student, whereby 86.7% strongly agreed on its ease of use and 73.3% strongly agreed to its access. This is in concordance with literature that postulates that easy to use educational tools help in improving outcomes in learning (Jonatan & Igor, 2023). Ease of use and compatibility with course content made for motivation and minimized technological intervention that can help in getting the most from technology integration for education (Baird et al., 2004).

As for improving the students' comprehension as well as increasing their critical thinking skills, Chat PDF AI was also seen as helpful. Thereby, facilitating the process of alienation from the text and developing critical thinking in students, 66.7% of students noted an increase in their ability to comprehend texts, while 73.3% found that their critical thinking improved with the use of the tool. The results of this study align with (Arifin, 2020) that pointed out that critical reading skills tools help in achieving enhanced understanding and critical thinking. Qualitative responses from the respondent supported these quantitative results showing that students found the tool's comprehensive explications helpful in the process of untangling complicated texts typical of academic writing. Nonetheless, a few students stated that overly technical descriptions can make it difficult to explain things; seeming to imply that more sophistication is sometimes counterproductive.

However, it is interesting to observe that the effect of Chat PDF AI on students' affective domains managed to present a positive sign. According to the students' perception, a high level of agreement was expressed in that the tool enhanced a positive attitude towards critical reading to the extent of 86.7%, and increased motivation by 66.7% and improved the enthusiasm towards reading assignments by proposing it as interesting and enjoyable by 80%. This turns out to be in synch with the assertion by AbuSahyon (2023) which noted the motivational impacts that come with AI based educational tools. Regarding the findings from the interviews, it was clear that students did enjoy the use of Chat PDF AI for being interactive in the learning

process and this in the view of Babashamasi (2022) correlates with the motivation and encouraging nature of interactive elements in learning activities.

The results of this study are in line with the TAM arguing that perceived ease of use and perceived usefulness impact the users' acceptance and usage of the technology in question (Davis, 1989). The findings of this study show high perceived ease of use and perceived usefulness for learning from Chat PDF AI, and this perception aligns with students' positive feedback towards it and can explain the impact of the tool on learning outcomes.

These results should encourage practitioners to justify the integration of user friendly as well as effective tools in education. This way, making tools comprehensible and offering explanations that can be well understood is not only beneficial for the improvement of the student cognition aspect but can also have a positive impact on the feelings/emotions aspect. In addition, the positive affectivities that have been obtained points to the fact that such tools can grow really important in complementing the fun of delivering on the crucial tasks of mediational reading. Nevertheless, it is also informative to highlight some of the limitations connected with the present work even if the results are generally positive. The number of surveys was also relatively significant, however this research was conducted only in one academic department so the findings cannot be generalized to another body of students. The restriction of time and the availability of the increased number of participants introduces a future suggestion to conduct a similar study involving the Chat PDF AI in different contexts and a more numerous sample of participants to validate these findings. Additionally, it would also extend the knowledge as to how beneficial similar tools are to students' learning if one investigated the possible positive and negative impacts of such tools on students' critical, analytical, and evaluative abilities as well as their academic performance in the long run.

Therefore, as per the study, Chat PDF AI can help to enhance the growth of students' critical reading abilities and boost their engagement level. Hence, this tool which was designed for both the knowledge acquisition and affective areas may be viewed as contribution to the educational process and integrated in the offerings of the critical reading courses to make a difference.

4. Conclusion and suggestion

This study has provided an evidence of the benefit of integrating Chat PDF AI into the critical reading course for pupils. The possibility of the tool to change the current approaches to education is apparently clear by the impact the tool has on students' attitudes, engagement and understanding. From the data, it is evident that from the respondents; 86 percent believe that there is a possibility of their organization finding a suitable partner through an online dating site. The questionnaire results revealed that 86.7% of the students appreciated the aspect of critical reading thanks to this program, 66.7% reported higher motivation. All the indicated evidence points rather clearly that the tool in question aids to enhance the level of classroom fun and enjoyment. The interviews also extend a verification of how these favourable results are further supported by the interactive parts of the program and therefore, the level of interaction and ease of access of reading tasks. Concerning the limitations, the main is the fairly small portion of the respondents and, as a result, the specific academic sample. Future researchers should attempt to examine the integration of Chat PDF AI and in a broader context and with larger and more heterogeneous sample to confirm these findings. Also, the research studies on the effects of the tool on other academic outcomes and students' analytical reading skills would provide a deeper insight into the value of the tool in education. Chat PDF AI is a significant advancement in educational technology; it offers an easy and effective way to enhance the analysis skills. This tool carries the ability to significantly improve students'

academic performance and wellbeing while learning as it fosters the cognitive and psychosocial domains of learning.

References

- AbuSahyon, A. S. E. (2023). AI-driven technology and chatbots as tools for enhancing English language learning in the context of second language acquisition: A review study. *International Journal of Membrane Science and Technology*, 10(1), 1209–1223. <https://doi.org/10.15379/ijmst.v10i1.2829>
- Ahn, J. S., Ebrahimian, S., McDermott, S., Lee, S.-H., Naccarato, L., Capua, J. F. D., Wu, M., Zhang, E. W., Muse, V. V., Miller, B. F., Sabzalipour, F., Bizzo, B. C., Dreyer, K. J., Kaviani, P., Digumarthy, S. R., & Kalra, M. K. (2022). Association of artificial intelligence–Aided chest radiograph interpretation with reader performance and efficiency. *Jama Network Open*, 5(8), e2229289. <https://doi.org/10.1001/jamanetworkopen.2022.29289>
- Al Roomy, M. A. (2022). Investigating the effects of critical reading skills on students' reading comprehension. *Arab World English Journal*, 13(1), 366–381. <https://doi.org/https://dx.doi.org/10.24093/awej/vol13no1.24>
- Arifin, S. (2020). The role of critical reading to promote students' critical thinking and reading comprehension. *Jurnal Pendidikan Dan Pengajaran*, 53(3), 318–326. <https://doi.org/https://dx.doi.org/10.23887/jpp.v53i1>
- Babashamasi, P. (2022). The effect of teaching metacognitive reading strategies on the critical thinking skills of undergraduate students. *International Journal of Applied Linguistics & English Literature*, 11(2), 65–71. <https://doi.org/10.7575/aiac.ijalel.v.11n.2p.65>
- Baird, H. S., Lopresti, D., Davison, B. D., & Pottenger, W. M. (2004). Robust document image understanding technologies. *Proceedings of the 1st ACM Workshop on Hardcopy Document Processing*, 9–14.
- Bearman, M., & Ajjawi, R. (2023). Learning to work with the black box: Pedagogy for a world with artificial intelligence. *British Journal of Educational Technology*, 54(5), 1160–1173. <https://doi.org/10.1111/bjet.13337>
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340.
- Dewi, V. K. (2024). Exploring the students' perceptions of the integration of web-based and non-web-based ICT in ELT at the vocational high school in Indonesia. *Journal on English as a Foreign Language*, 14(1), 285–315. <https://doi.org/10.23971/jefl.v14i1.7818>
- Duong, T. (2024). The effects of an artificial intelligence voice chatbot on improving Vietnamese undergraduate students' English speaking skills. *International Journal of Learning Teaching and Educational Research*, 23(3), 293–321. <https://doi.org/10.26803/ijlter.23.3.15>
- Hazaymeh, W. A. (2024). EFL instructors' perspective on using AI applications in English as a foreign language teaching and learning. *Emerging Science Journal*, 8, 73–87. <https://doi.org/10.28991/esj-2024-sied1-05>
- Huynh-The, T., Pham, Q.-V., Pham, X.-Q., Nguyen, T. T., Han, Z., & Kim, D.-S. (2023). Artificial intelligence for the metaverse: A survey. *Engineering Applications of Artificial Intelligence*, 117, 105581.
- Jonatan, V., & Igor, A.-A. (2023). Creation of a chatbot based on natural language processing for whatsapp. *ArXiv Preprint ArXiv:2310.10675*, 12(2), 11–24.

- Kemelbekova, Z. (2024). AI in teaching english as a foreign language: Effectiveness and prospects in Kazakh higher education. *Xlinguae*, 17(1), 69–83. <https://doi.org/10.18355/xl.2024.17.01.05>
- Leander, K. M., & Burriss, S. K. (2020). Critical literacy for a posthuman world: When people read, and become, with machines. *British Journal of Educational Technology*, 51(4), 1262–1276. <https://doi.org/10.1111/bjjet.12924>
- Lee, Y.-J. (2024). University students' perceptions of artificial intelligence-based tools for English writing courses. *Online Journal of Communication and Media Technologies*, 14(1), e202412. <https://doi.org/10.30935/ojcm/14195>
- McCauley, C. (2020). The Essence of Hate and Love. <https://doi.org/10.1037/0000180-003>
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook*. 3rd. Thousand Oaks, CA: Sage.
- Mohseni Takaloo, N., & Ahmadi, M. R. (2017). The effect of learners' motivation on their reading comprehension skill: A literature review. *International Journal of Research in English Education*, 2(3), 10–21. <https://doi.org/dx.doi.org/10.18869/acadpub.ijree.2.3.10>
- Moulieswaran, N., & Kumar N S, P. (2023). Investigating ESL learners' perception and problem towards Artificial Intelligence (AI) -Assisted English language learning and teaching. *World Journal of English Language*, 13(5), 290. <https://doi.org/10.5430/wjel.v13n5p290>
- Moybeka, A. M. S. (2023). Artificial intelligence and English classroom: The implications of AI toward EFL students' motivation. *Edumaspul - Jurnal Pendidikan*, 7(2), 2444–2454. <https://doi.org/10.33487/edumaspul.v7i2.6669>
- Murray, M. C., Pérez, J., & Fluker, J. (2022). Digital literacy in the core: The emerging higher education landscape. *Issues in Informing Science and Information Technology*, 19, 1–13.
- Muslimin, A. I. (2024). Evaluating camii AI across SMAR stages: Students' achievement and perceptions in EFL writing instruction. *Online Learning*, 28(2). <https://doi.org/10.24059/olj.v28i2.4246>
- Pereira, G. K. R., & Moreschi, B. (2019). Ways of seeing with computer vision: artificial intelligence and institutional critique. <https://doi.org/10.33767/osf.io/nv9z2>
- Radanliev, P., Roure, D. D., Maple, C., & Ani, U. (2021). Methodology for integrating artificial intelligence in healthcare systems: Learning from covid-19 to prepare for disease X. *AI and Ethics*, 2(4), 623–630. <https://doi.org/10.1007/s43681-021-00111-x>
- Remizantseva, K., & Ablyazov, T. (2019). Generation Z and digital tools in teaching foreign languages BT. *Proceedings of the International Conference on Digital Technologies in Logistics and Infrastructure (ICDTLI 2019)*, 341–347. <https://doi.org/10.2991/icdtli-19.2019.60>
- Rini, T. A. (2018). Creating critical literacy skills for young learners at primary school. *Proceedings of the 1st International Conference on Early Childhood and Primary Education (ECPE 2018)*, 230–235. <https://doi.org/10.2991/ecpe-18.2018.51>
- Rojalai, A., Susaie, J. S., Balaraman, L., Manoharan, S. R., Mustafa, Z., & Hashim, H. (2021). Language learning strategies used for enhancing reading skills among Year 6 pupils of a primary school in Selangor. *International Journal of Academic Research in Business and Social Sciences*, 11(6), 1186–1195. <https://doi.org/10.6007/IJARBS/v11-i6/10044>
- Sharadgah, T. A., & Sa'di, R. A. (2022). A systematic review of research on the use of artificial intelligence in English language teaching and learning (2015-2021): What are the current effects? *Journal of Information Technology Education Research*, 21, 337–377. <https://doi.org/10.28945/4999>

- Sheng, B. (2023). Research on the innovation of English teaching mode based on artificial intelligence. *Frontiers in Education Technology*, 6(4), p106. <https://doi.org/10.22158/fet.v6n4p106>
- Sumakul, D. T. Y. G., Hamied, F. A., & Sukyadi, D. (2022). Students' perceptions of the use of AI in a writing class. *67th TEFLIN International Virtual Conference & the 9th ICOELT 2021 (TEFLIN ICOELT 2021) Students'*, 52–57. <https://doi.org/10.2991/assehr.k.220201.009>
- Tanksley, T. C. (2024). “ We ’ re changing the system with this one ” : Black students using critical race algorithmic literacies to subvert and survive AI-mediated racism in school. *English Teaching: Practice & Critique*, 1–21. <https://doi.org/10.1108/ETPC-08-2023-0102>