Scientific Journal of University of Benghazi
SJUOB (2025) 38 (2) Humanities Sciences: Hadaga & Elfalfal, 10 – 22
www.sjuob.uob.edu.ly

Libyan EFL Teachers' Perceptions of AI Integration in English Teaching: A Case Study at Benghazi University.

Hana Mahmoud Hadaga[1]*, Amal Mohammed Elfalfal[1].

1 Department of English, Faculty of Languages, University of Benghazi.

DOI: 10.37376/sjuob.v38i2 | Received:21/07/2025 | Accepted:17/10/2025 | Publishing: 23/12/2025

ABSTRACT

There is an inevitability and increasing use of technologies such as Artificial Intelligence (AI) in language teaching and learning. This research investigates EFL Libyan teachers' perceptions of the effectiveness of integrating AI tools in EFL teaching in the Libyan context. The study employed a quantitative approach of research in which a questionnaire was distributed to collect data from 20 EFL Libyan teachers in the department of applied linguistics at the Faculty of Languages at Benghazi University in Libya. The questionnaire examined data relevant to Libyan EFL teachers' perspectives on integrating AI in their teaching process and the challenges encountered. The results showed that most participants had a positive attitude towards using AI in their teaching. The majority believed that AI is important for helping students improve their language skills and making English teaching more effective. In addition, they mutually agreed that AI encouraged their students to participate more actively in class and helped to reduce their anxiety about making mistakes. However, the study revealed that participants collectively faced challenges in using AI. One major challenge was that they mostly relied on self-study to learn about these technologies rather than formal training. Findings of this study provide feedback to the head dean of the Department of Applied Linguistics for possible improvements. Furthermore, these findings can inform future enhancement initiatives in other similar Libyan EFL contexts. A better integration of AI into educational settings is needed, and more support and training are necessary for successful implementation.

KEYWORDS: Instructors, EFL context, Artificial Intelligence.

*Corresponding Author: Hana Mahmoud Hadaga, hana.hadaga@uob.edu.ly

University of Benghazi©2025 All rights reserved. ISSN: Online 2790-1637, Print 2790-1629
National Library of Libya, Legal number: 154/2018

1.INTRODUCTION

In recent years, there has been a notable integration of technology, particularly artificial intelligence (AI) within EFL classrooms. AI tools, such as chatbots, voice recognition systems, and platforms like ChatGPT, have demonstrated effectiveness in enhancing the teaching and learning of English [1, 2]. The proliferation of mobile computing and widespread internet access has catalyzed the development of online learning platforms providing learners with convenient access to diverse educational resources [3, 4, 5].

The term "artificial intelligence" (AI) was first coined by John McCarthy who was the inaugural professor of AI at Stanford University in 1955. He defined AI as the science and engineering of crafting intelligent machines [6]. AI fundamentally involves the creation of computer systems or machines that demonstrate a range of competencies such as computer vision, speech recognition, and problem-solving [7].

Many researchers (Chen et al., Tang et al., and Zhai et al.) believe that AI can greatly improve language education by enhancing teaching methods and helping students achieve better results [8, 9, 10]. Some think that AI can reduce teachers' workload by handling repetitive tasks like grading and giving feedback. This allows teachers to spend more time on direct teaching and supporting students [11]. Others (Like Jeon [12]) believe that AI helps students develop decision-making skills and prediction abilities [12]. Various AI tools can assist learners in improving their language skills [2, 13]. A significant benefit of incorporating AI into EFL classrooms is its ability to personalize learning providing individualized feedback [14, 2].

Despite recognizing the above benefits of AI tools, many educators expressed concerns about their impact on academic learning. Some argued that using AI may negatively affect the quality of education and students' learning outcomes [15]. Students might misuse AI technologies for dishonest purposes such as, plagiarism which could affect the authenticity of their work [16]. Another major concern of AI tools in learning is that students might use generative AI tools to cheat in their written assignments, presentations, and exams [17]. This could weaken students' writing skills and critical thinking, as they depend more on automated technologies to complete their work [18]. Additionally, some educators stress the importance of human interaction in language learning, especially for understanding cultural nuances and context, which AI cannot fully provide [19, 20]. Moreover, incorporating AI into EFL classrooms comes with challenges including the costs and technical skills needed to establish and maintain these systems [21].

The extent of application of AI in EFL contexts has been recognized many by researchers. For example, Alshumaimeri and Alshememry [22], in 2024, conducted a systematic review of the literature on the applications of AI in English as a Foreign Language (EFL) education. Findings suggested that argumentative writing in AI applications had received the most research attention, followed by language education, automated feedback, surveys, and translation research [22]. Also, Abolkasim and Hasan [23] evaluated the potential for incorporating Artificial Intelligence (AI) technologies in the process of learning at the university level in Libya, examining both the students' and staff members' perspectives. The results showed that there was a strong tendency to use ChatGPT in the educational system in Libya by both the students and instructors, for purposes such as scientific research, studying, planning lectures, answering assignments, and writing tasks. However, some concerns were raised about students becoming too dependent on AI tools, which could affect their integrity and creativity [23]. Furthermore, Hmouma [24] conducted a study in 2024 where views of EFL students from Al-Rifaq University in Tripoli/ Libya regarding the use of AI-based language learning applications were examined. The results showed that most participants were in favor of using AI tools, and expressed a preference for

University of Benghazi©2025 All rights reserved. ISSN: Online 2790-1637, Print 2790-1629
National Library of Libya, Legal number: 154/2018

personalized learning experiences and the immediate feedback that AI provides. However, there were notable concerns about the possibility of AI replacing teachers in the future [24].

Although AI is becoming more common in education [25], its exact role is still unclear [26], making it difficult for teachers to understand how best to use it in EFL classrooms. Moreover, there is still a need for more understanding of educators' perception of AI tools in teaching and learning [23]. The significance of this research lies in the fact that, to the best of the researcher's knowledge, no previous study has investigated the perceptions of EFL teachers in the Department of Applied Linguistics at the Faculty of Languages in Benghazi towards the use of AI tools in teaching. Therefore, this study aimed to add to the literature and to gain insights into the perceptions of EFL Libyan instructors regarding the benefits and challenges of integrating AI in Libyan EFL classrooms. This research would assess the advantages and obstacles associated with using AI applications in EFL classes, aiming to provide valuable insights and recommendations for the head dean of the Faculty of Languages. Specifically, the study aimed to answer the following question:

1.What perspectives do Libyan EFL instructors in the department of Applied Linguistics at the Faculty of Languages at Benghazi University in Libya hold regarding the use of using AI tools in teaching English as a Foreign language in Libyan EFL classrooms?

2. MATERIALS AND METHODS

The researcher, being a member of the Applied Linguistics Department, chose her colleagues to take part in the study because she is directly involved in this teaching environment. The main goal of selecting this group was to understand their views on using AI tools in teaching aiming to show the overall situation among the department's teachers and to offer feedback to the head dean for potential improvements. A total of 20 Libyan EFL instructors from the Department of Applied Linguistics at the Faculty of Languages, Benghazi University, took part. These participants included both male and female teachers and represented the whole population of the teaching staff of the department for the academic year 2024/2025. The head dean of the Faculty of Languages confirmed this selection.

This study used a descriptive-analytical approach. A quantitative research method was employed due to its efficiency in terms of time as it allows the collection of data from a significant number of participants within a relatively short period. Moreover, this method facilitates objective analysis and interpretation through the use of numerical data and statistical tools [27]. A closed-ended questionnaire was employed based on Kumar [27] who noted that the use of closed-ended questions in a questionnaire facilitates the collection of the desired data by the researcher and simplifies the analysis process.

The selected questionnaire was employed because it provided relevant data to this research questions mentioned earlier. That is, the questionnaire focused on two main topics: (1) the role of AI in learning English as a second Language, and (2) how utilizing AI can improve the English Language Teaching (ELT) process, with the second topic focusing on the challenges that are associated with the application of AI to the educational process. The questionnaire included seven items. Each item used a Likert scale from one to five. The five possible responses were: strongly agree, agree, neutral, disagree, and strongly disagree. The questionnaire was adopted from Alhalangy and AbdAlgane [19]. And it was distributed to participants in person not online.

3. RESULTS AND DISCUSSION

To analyze the data collected from the questionnaire responses, the researcher employed the formula provided by Zamri et al. [28], which was as follows:

$$P = \frac{F}{N} \times 100\%$$

Where, P= Percentage, F= Frequency, N= Total number of the respondents. The total responses for each

University of Benghazi©2025 All rights reserved. ISSN: Online 2790-1637, Print 2790-1629
National Library of Libya, Legal number: 154/2018

item should add up to 100%. After applying this formula to the participants' responses, the results were described statistically. These findings are presented in Table (1) below.

Table (1): Descriptive Statistics of Participants' Responses to the Questionnaire Items

Questionnaire Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. Artificial Intelligence (AI) plays a significant role in promoting EFL learners' language skills.	65%	35%	0%	0%	0%
2. Utilizing AI could facilitate the ELT process.	60%	30%	5%	5%	0%
3. Integrating AI tools into ELT poses challenges for both instructors and learners.	10%	45%	40%	5%	0%
4. My professional development in using computer and internet services is based on self-training.	70%	20%	5%	5%	0%
5.I believe that incorporating AI into the classroom encourages learners to take an active role in their learning.	50%	30%	10%	10%	0%
6. AI technology reduces the stress of trial and error in learning.	30%	45%	5%	10%	10%
7. AI could cause boredom and a lack of desire to learn and teach EFL since both learners and teachers deal with machines.	10%	5%	30%	35%	20%

To ensure clear and smooth discussion to the questionnaire results presented in Table 1 above, the data from each item were presented using pie charts. These charts employed a distinct color scheme to represent the different Likert scale responses: blue for "strongly agree," green for "agree," yellow for "neutral," orange for "disagree," and red for "strongly disagree." This color-coding was chosen to visually separate the response categories, making the data easier to interpret and understand.

In the first item of the questionnaire, 65% of participants strongly agreed that AI plays a significant role in enhancing EFL learners' language skills, 35% had agreed as well. The results are illustrated in Figure 1 below.

University of Benghazi©2025 All rights reserved. ISSN: Online 2790-1637, Print 2790-1629
National Library of Libya, Legal number: 154/2018

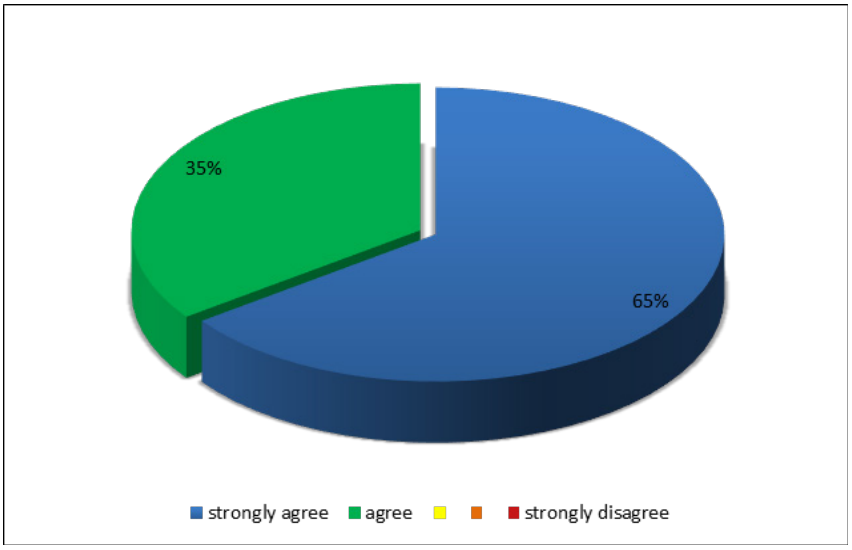


Figure 1: (Participants' Responses to the First Questionnaire Item).

The pie chart shows that all participants believe AI can enhance students' language skills, with 65% strongly agreeing (blue) and 35% agreeing (green). This positive perception may stem from teachers' experiences using AI in their classrooms, where it provided clear, easy-to-understand materials that helped learners practice effectively. Notably, no participants selected neutral, disagree, or strongly disagree options, indicating unanimous agreement with the statement.

In the second item of the questionnaire, participants were asked whether AI could help improve the process of teaching English as a foreign language (EFL). The results are illustrated in the pie chart below.

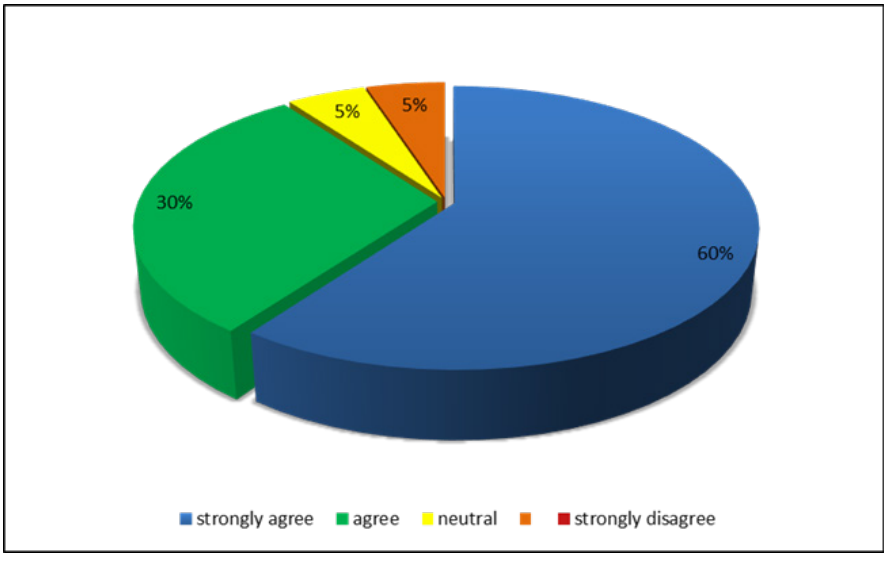


Figure 2: (Participants' Responses to the Second Questionnaire Item).

University of Benghazi©2025 All rights reserved. ISSN: Online 2790-1637, Print 2790-1629
National Library of Libya, Legal number: 154/2018

Figure 2 shows that most participants (60% strongly agreed (blue) and 30% agreed (green) have a positive attitude toward using AI to support English Language Teaching (ELT). This positive view may come from their own teaching experiences, where they used AI tools and saw how these tools made teaching easier and more effective. However, one participant (5%) gave a neutral response (yellow), and another participant (5%) disagreed (orange) with the statement about AI's usefulness. These less positive views may be due to concerns about AI's accuracy, with some fearing that AI might provide incorrect or misleading information. Additionally, they may believe that teaching is a personal and human activity.

In the third item of the questionnaire, participants were asked whether integrating AI tools into English Language Teaching (ELT) creates challenges for both instructors and learners. The results are shown in Figure 3 below.

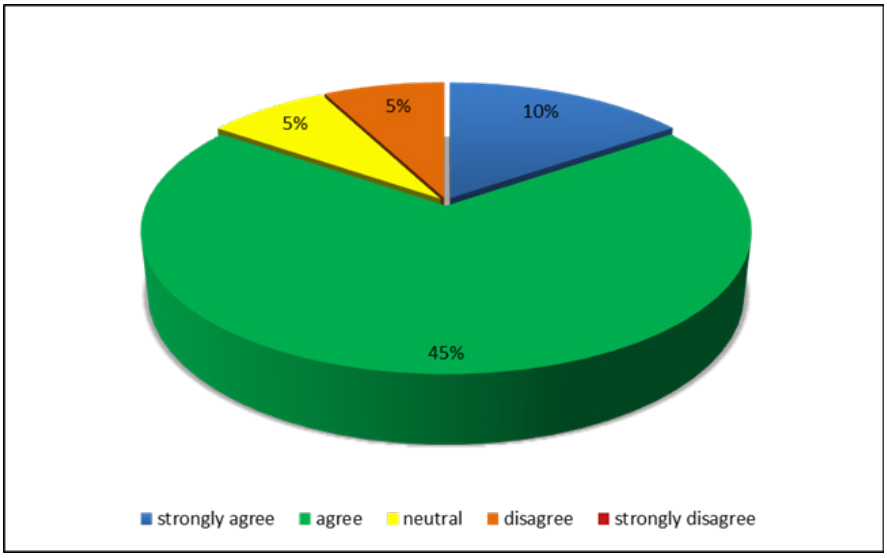


Figure 3: (Participants' Responses to the Third Questionnaire Item).

Figure 3 shows that more than half of the participants (45% in green and 10% in blue) agree that AI presents challenges for teachers and learners. This indicates that these participants likely have experienced using AI in their classrooms and understood the difficulties it could cause. It appears that they have directly encountered these challenges during their teaching. On the other hand, 5% of participants were neutral (yellow), and another 5% disagreed (orange). This may be because they have not yet used AI in their teaching or do not have enough knowledge about these challenges to fully recognize the problems involved.

Additionally, item four in the questionnaire explores whether participants' professional development in using computers and internet services stems from self-training. These results are illustrated in the pie chart below.

University of Benghazi©2025 All rights reserved. ISSN: Online 2790-1637, Print 2790-1629
National Library of Libya, Legal number: 154/2018

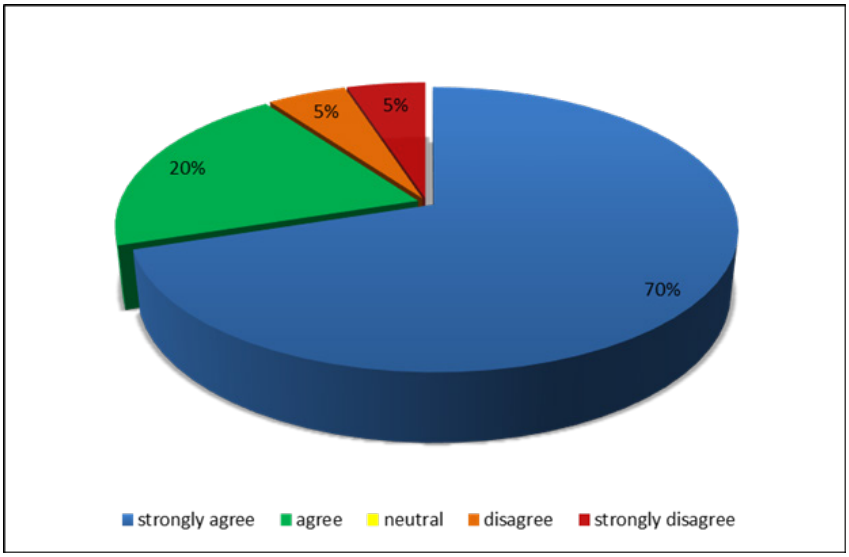


Figure 4: (Participants' Responses to the Fourth Questionnaire Item).

Figure 4 shows that most participants (70% in blue and 20% in green) agreed that their professional development in using computers and the internet is mainly based on self-training. This suggests that they have recognized the importance of improving their computer and internet skills and have seen their profession in teaching is a self-directed responsibility. However, 5% of participants disagreed, and another 5% strongly disagreed (shown in orange and red respectively). This disagreement might be because these participants rely more on formal training programs, such as workshops, seminars, or official sessions provided by their institutions.

Item five in the questionnaire asked participants whether using AI in classroom activities can help learners become more active in their learning. The results are clearly displayed in the pie chart below.

University of Benghazi©2025 All rights reserved. ISSN: Online 2790-1637, Print 2790-1629
National Library of Libya, Legal number: 154/2018

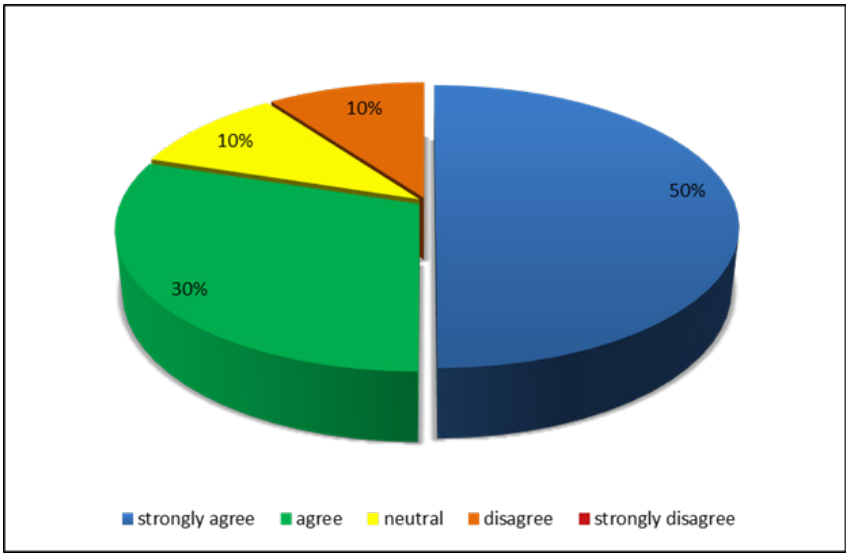


Figure 5: (Participants' Responses to the Fifth Questionnaire Item).

As indicated in Figure 5 above, most participants (50% strongly agreed in blue and 30% agreed in green) support the statement that using AI activities in the classroom helps students become more active learners. They likely hold this view because they have observed increased student participation when AI was used in their classes. 10% of participants were neutral (presented in yellow), possibly because they have not noticed any effects of AI or have not used AI in their teaching. Another 10% disagreed (reflected in orange), and none strongly disagreed. These participants may not rely on AI to engage their students or to select classroom activities that encourage their students' responsibility. This suggests that while many see AI as helpful for student engagement, some remain uncertain or skeptical about its role in the classroom.

Item six in the questionnaire investigates whether using AI technology reduces the stress caused by trial and error in learning. Results are clearly shown in the pie chart below.

University of Benghazi©2025 All rights reserved. ISSN: Online 2790-1637, Print 2790-1629
National Library of Libya, Legal number: 154/2018

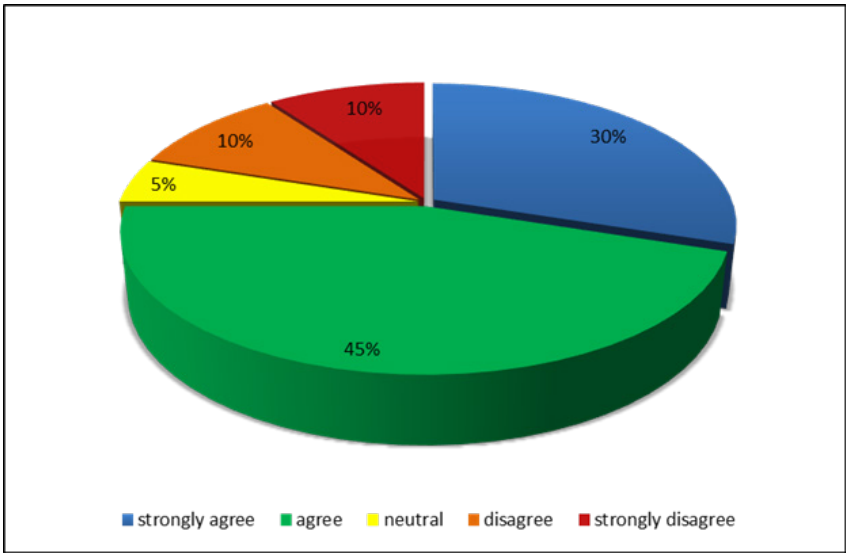


Figure 6: (Participants' Responses to the Sixth Questionnaire Item).

The figure above clearly indicates that most participants (30% strongly agreed in blue and 45% agreed in green) believe that AI tools can reduce stress by offering personalized learning and helping students handle difficult tasks more easily. This positive view may come from their experience using AI in classrooms, where it improved learning and reduced frustration. They also agreed that AI can provide emotional support and simplify complex tasks, which helps lower stress during learning. Five percent of participants were neutral about this statement. However, 10% strongly disagreed and another 10% disagreed. These participants might think that AI tools cause confusion and cognitive overload instead of making learning easier.

They may also believe that students benefit more from face-to-face explanations than from AI-based learning.

The seventh item in the questionnaire asked participants whether using AI could cause boredom and reduce motivation to learn and teach English as a Foreign Language (EFL). The percentages are shown in the pie chart below.

University of Benghazi©2025 All rights reserved. ISSN: Online 2790-1637, Print 2790-1629
National Library of Libya, Legal number: 154/2018

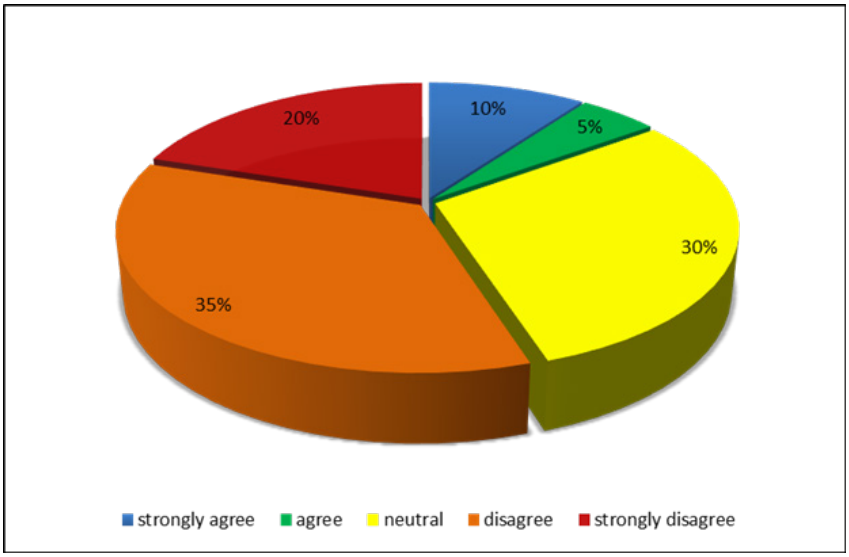


Figure 7: (Participants' Responses to the Seventh Questionnaire Item).

The pie chart in Figure 6 above shows that less than one quarter of participants (10% strongly agreed in blue and 5% agreed in green) believe that AI could cause boredom and reduce motivation to learn and teach. This view may stem from the idea that the lack of emotional connection and real human feedback in AI tools makes learning less personal, which can lower students' motivation and engagement. It might also be related to the fact that AI provides instant answers, which could make teachers and learners less active in thinking critically. Thirty percent of participants were neutral.

However, more than half of participants (35% disagreed in orange and 20% strongly disagreed in red) rejected the idea that AI causes boredom or frustration. These participants likely believe that AI can offer learning materials that fit individual learning styles, making learning more enjoyable and engaging instead of boring.

4.CONCLUSION

The study concluded that the majority of Libyan EFL instructors in the Department of Applied Linguistics at the Faculty of Languages in Benghazi during the 2024/2025 academic year had a positive attitude toward using artificial intelligence (AI) in their teaching. Instructors viewed AI as important for helping students enhance their language skills.

They believed AI encourages active participation and reduces the fear of making mistakes. Most instructors did not think AI causes boredom or lowers motivation; rather, they saw it as a tool that provides personalized learning materials to meet individual needs and boost engagement. However, many teachers reported facing challenges when using AI and primarily learned to use these tools through self-study.

Findings of this study were in consistence with Abolkasim and Hasan [23], whose study showed a strong interest in using AI tools in Libya's education system. However, some worries were raised about students becoming too dependent on AI tools, which might cause laziness and affect their honesty and creativity [23]. The results of this research also aligned with Hmouma [24], who found that EFL students support using technology to improve their English skills, and valued the quick feedback that AI offers. Despite this, several concerns were still expressed [24]. Finally, findings of this re-

University of Benghazi©2025 All rights reserved. ISSN: Online 2790-1637, Print 2790-1629
National Library of Libya, Legal number: 154/2018

search are somewhat similar to those of Alshumaimeri and Alshememry [22] who conducted a systematic examination for 80 papers from IEEE, Scopus, and Web of Science databases and found that AI tools were the most preferred applications among Liban EFL participants.

Findings of this study provide significant feedback to the head dean of the Faculty of Languages that it is crucial that AI tools be formally integrated in EFL classrooms. The study contributes to existing literature by examining teachers' perceptions of AI in an area not previously explored. It found that EFL Libyan teachers in the Department of Applied Linguistics at the Faculty of Languages have a positive attitude toward using AI in teaching. Moreover, these findings can guide future improvement initiatives in other similar Libyan EFL contexts. The researcher recommends that future research aim to find solutions to the identified AI challenges in this study. Additionally, educational procedures for effective integration of AI into classrooms provided in formal institutional programs are urgent to develop clear guidelines and ethical frameworks for AI use classrooms. Finally, this research is limited to teachers of Applied Linguistics at the Faculty of Languages in Benghazi, future research should be conducted in other Libyan EFL settings and focus on how AI can support the development of specific language skills, such as reading, writing, listening, and speaking.

5.ACKNOWLEDGMENT

I would like to sincerely thank my colleagues in the Department of Applied Linguistics at the Faculty of Languages, Benghazi University, as well as the administration, for their support and for granting me the opportunity to carry out this research.

REFERENCES

1. Lee D, Kim H, Sung SH. Development research on an AI English learning support system to facilitate learner-generated-context-based learning. Educ Technol Res Dev. 2023;71(2):629-66. https://doi:10.1007/s11423-022-10172-2

2. Jiang R. How does artificial intelligence empower EFL teaching and learning nowadays? A review on artificial intelligence in the EFL context. Front Psychol. 2022;13:1049401. https://doi:10.3389/fpsyg.2022.1049401

3. Criollo S, Guerrero-Arias A, Jaramillo-Alcázar Á, Luján-Mora S. Mobile learning technologies for education: benefits and pending issues. Appl Sci. 2021 May 6;11(9):4111. https://doi:10.3390/app11094111

4. Şad SN, Özer N, Yakar Ü, Öztürk F. Mobile or hostile? Using smartphones in learning English as a foreign language. Comput Assist Lang Learn. 2022;35(5-6):1031-57. https://doi:10.1080/09588221.2020.1770292

5. Zain DSM, Bowles FA. Mobile-assisted language learning (MALL) for higher education instructional practices in EFL/ESL contexts: a recent review of literature. Computer Assist Lang Learn Electron J. 2021;22(1):282-307. Available form: https://www.researchgate.net/publication

6. Christopher M. Artificial intelligence definitions. Stanford University Human Centered Artificial Intelligence [Internet]. 2020 [cited 2025 Jul 15]. Available from: https://hai.stanford.edu/sites/default/files/2020-09/AI-Definitions-HAI.pdf

7. Ejaz U, Godwin O. Ethical considerations in the deployment and regulation of artificial intelligence [Internet]. 2024 [cited 2025 Jul 15]. Available from: https://www.researchgate.net/publication/378070372

8. Chen X, Xie H, Zou D, Hwang GJ. Application and theory gaps during the rise of Artificial Intelligence in Education. Comput Educ Artif Intell [Internet]. 2020 [cited 2025 Jul 15];1:100002. Available from: https://doi.org/10.1016/j.caeai.2020.100002

9. Tang KY, Chang CY, Hwang GJ. Trends in artificial intelligence-supported e-learning: a systematic review and co-citation network analysis (1998–2019). Interact Learn Environments. 2023;31(4):2134-52. DOI:10.1080/10494820.2021.1875001

University of Benghazi©2025 All rights reserved. ISSN: Online 2790-1637, Print 2790-1629
National Library of Libya, Legal number: 154/2018

10. Zhai X, Chu X, Chai CS, Jong MSY, Istenic A, Spector M, et al. A review of artificial intelligence (AI) in education from 2010 to 2020. Complexity. 2021;2021(1):e8812542. https://doi:10.1155/2021/8812542

11. Schmidt T, Strassner T. Artificial intelligence in foreign language learning and teaching. Anglistik. 2022;33(1):165-84. https://doi:10.33675/angl/2022/1/14

12. Jeon G. Artificial intelligence approaches for energies. Energies. 2022;15(18):6651. https://doi:10.3390/en15186651

13. Kuning DS. Technology in teaching speaking skill. J Engl Educ Lit Linguist. 2019;2(1):50-9. https://doi:10.31540/jeell.v2i1.243

14. Akyuz Y. Effects of intelligent tutoring systems (ITS) on personalized learning (PL). Creative Education [Internet]. 2020 Jun 11 [cited 2025 Jul 15];11(6):953-78. Available from: https://doi.org/10.4236/ce.2020.116069

15. Korn J, Kelly S. New York City public schools ban access to AI tool that could help students cheat. CNN [Internet]. 2023 Jan 6 [cited 2025 Jul 15]. Available from: https://edition.cnn.com

16. Alharbi M. The role of artificial intelligence in advancing English as a foreign language teaching at Saudi universities. World J Educ Technol Curr Issues [Internet]. 2024 [cited 2025 Jul 15];16(3):181-200. Available from: https://doi.org/10.18844/wjet.v16i3.9311

17. Farahat A. Elements of academic integrity in a cross-cultural Middle Eastern educational system: Saudi Arabia, Egypt, and Jordan case study. Int J Educ Integrity [Internet]. 2022 [cited 2025 Jul 15];18:1-18. Available from: https://www.researchgate.net/deref/https

18. Civil B. ChatGPT can hinder students' critical thinking skills: Artificial intelligence is changing how students learn to write. The Queen's Journal [Internet]. 2023 [cited 2025 Jul 15]. Available from: https://www.queensjournal

19. Alhalangy I, AbdAlgane M. Exploring the impact of AI on the EFL context: a case study of Saudi universities. J Intercult Commun [Internet]. 2023 [cited 2025 Jul 15];23(2):41-9. Available from: https://doi.org/10.36923/jicc.v23i2.125

20. AbdAlgane M, Jabir Othman KA. Utilizing artificial intelligence technologies in Saudi EFL tertiary level classrooms. J Intercult Commun [Internet]. 2023 [cited 2025 Jul 12];23(1). Available from: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4565768

21. Holstein K, McLaren BM, Aleven V. Spacle: Investigating learning across virtual and physical spaces using spatial replays. ACM Int Conf Proceeding Ser. 2017:358-67. https://doi:10.1145/3027385.3027450

22. Alshumaimeri Y, Alshememry A. The extent of AI applications in EFL learning and teaching. IEEE Trans Learn Technol [Internet]. 2024 [cited 2025 Jul 15];17:653-63. Available from: https://doi.org/10.1109/TLT.2023.3322128

23. Abolkasim E, Hasan M. Integrating ChatGPT in education and learning: A case study on Libyan universities. Sebha Univ J Pure Appl Sci [Internet]. 2024 [cited 2025 Jul 15];23(2). Available from: https://doi.org/10.51984/JOPAS.V23I2.3082

24. Hmouma M. Exploring Libyan EFL undergraduates' attitudes towards AI-driven English learning applications. J Alzawia Univ Fac Educ [Internet]. 2024 [cited 2025 Jul 15];26:1-13. Available from: https://www.scribd.com/document/

25. Law L. Application of generative artificial intelligence (GenAI) in language teaching and learning: A scoping literature review. Comput Educ Open. 2024;6:100174. https://doi:10.1016/j.caeo.2024.100174

26. Ng DTK, Leung JKL, Chu SKW, Qiao MS. Conceptualizing AI literacy: An exploratory review. Comput Educ Artif Intell. 2021;2:100041. https://doi:10.1016/j.caeai.2021.100041

27. Kumar R. Research methodology: a step-by-step

University of Benghazi©2025 All rights reserved. ISSN: Online 2790-1637, Print 2790-1629
National Library of Libya, Legal number: 154/2018

guide for beginners. 4th ed. London: SAGE Publication Ltd; 2014.

28. Zamri NA, Purwati AS, Sudjono. The effect of profitability and leverage ratios on earnings per share (EPS): An empirical study on manufacturing companies listed on the Indonesia Stock Exchange in the year 2012-2015. Al-Tijary J Islam Econ Bus. 2016;1(2):151-66. https://doi:10.21093/at.v1i2.532

University of Benghazi©2025 All rights reserved. ISSN: Online 2790-1637, Print 2790-1629
National Library of Libya, Legal number: 154/2018