Exploring Students' Attitudes Regarding the Use of AI-Assisted English Language Learning

✎ Boumaraf Amel
amel.boumaraf@univ-khenchela.dz
Abbes Laghrour University, Khenchela /Algeria

استكشاف آراء الطلاب بخصوص استخدام أدوات الذكاء الاصطناعي في تعلم اللغة الإنجليزية

✎ بومعراف أمال
Amel.boumaraf@univ-khenchela.dz
جامعة عباس لغرور/خنشلة /الجزائر

ABSTRACT:

This descriptive study investigates the attitudes of 50 students at the Department of English of Khenchela University towards the use of new innovative AI-assisted English language learning tools. Employing a structured questionnaire, the research aimed to discern and gauge students' satisfaction levels, concerns, and preferences regarding AI technology integration in language education. The results highlighted overwhelming favorable reactions from students demonstrating AI's ability to tailor learning, increase engagement, improve efficiency, and boost learners' motivation and confidence, making EFL more accessible and fun for students of all backgrounds, learning styles, and competence levels.

Key Words: Artificial, intelligence, tools, technology innovative

مُلَخَّصُ البَحْثِ

تهدف هذه الدراسة الوصفية إلى استقصاء آراء 50 طالبًا في قسم اللغة الإنجليزية في جامعة خنشلة حول استخدام أدوات التعلم الإنجليزية الجديدة والمبتكرة المساعدة بالذكاء الصناعي. باستخدام استبيان منهجي، يهدف البحث   إلى

استكشاف آراء الطلاب بخصوص استخدام التعلم باللغة الإنجليزية المساعد بواسطة الذكاء الاصطناعي و التعرف على مستويات رضا هم واهتماماتهم وتفضيلاتهم بشأن تكامل تكنولوجيا الذكاء الاصناعي في تعلم اللغة الانجليزية. أظهرت النتائج ردود فعل إيجابية ساحقة من الطلاب توضح قدرة الذكاء الاصناعي على تخصيص عملية التعلم، وزيادة المشاركة، وتحسين الكفاءة، وزيادة تحفيز الطلاب وثقتهم، مما يجعل تعلم اللغة الإنجليزية كلغة أجنبية أكثر إمكانية ومتعة للطلاب من جميع الخلفيات، و أنماط التعلم، ومستويات الكفاءة

الكلمات الرئيسية: الذكاء، الاصناعي، أدوات، تكنولوجيا، مبتكرة

1. **Introduction:**

Recent years have seen a radical transformative shift in the field of education, one that has been sparked by the quick development and integration of artificial intelligence (AI) and e-learning technologies into pedagogical contexts. Due to its potential to change the dynamics of language acquisition, the use of AI-assisted tools and platforms in language teaching and learning has drawn and garnered considerable increasing attention. The rapidly unplanned incorporation of e-learning in the Algerian higher education system has driven academics and educators to find adequate strategies for its effective successful implementation. Because of this, the current article at hand suggests that AI is leading the way in the developments that are fast occurring.

This study dives into the area of AI-assisted English language learning with the primary objective of revealing students' attitudes and viewpoints towards the use of AI as a supplement tool to conventional traditional language learning methods,

Although researchers and educators have garnered much attention on the use of AI in language learning, there is still a noticeable lack of knowledge on how students perceive and use these technologies. The paper in hand also aims to draw attention to the use of AI in EFL instruction and raise awareness concerning the AI significance in the context of learning a foreign language.

It is important to understand students' perspectives toward AI-assisted language learning because doing so has significant ramifications. It provides information that can be used to help customize these tools to meet the needs and expectations of students, and it influences the design and implementation of AI-driven language learning platforms. This research is situated at the nexus of technology and pedagogy where AI stands as both a potent tool and a topic of interest among researchers, learners, and teachers.

Throughout this article, we undertake a thorough comprehensive exploration of students' attitudes, expectations, and experiences with AI technology in the context of learning the English language.

2. Literature Review

The transition to the twenty-first century has been accompanied by many fundamental changes in the educational system in terms of learning inputs, processes, and outcomes. Underwood and Luckin (2011) underline the importance of introducing and incorporating artificial intelligence into education. They argue that one of the most significant and crucial reasons for using and applying AI methods in the development and creation of technology-enhanced learning is to construct systems that assist both educators and students in making optimal choices to improve the learning process.

In the field of education, artificial intelligence (AI) has evolved as a disruptive transformative force as it is currently advancing at a rapidly accelerated pace. Tira (2021) indicated that Artificial intelligence (AI) is a computer-based human intelligence simulation designed to function like humans. It is an area of study and field of science concerned with the artificial replication of human intelligence's cognitive abilities to create software or computers designed capable of performing tasks that humans ordinarily do. The same was pinpointed by Kaur and Gill (2019) claiming that artificial intelligence (AI) is a digital endeavor to acquire human-level intelligence through various machine computations.

The introduction of ChatGPT and other artificial intelligence (AI) tools has sparked alarm and intense discussion and debate among educators throughout the world about the real and potential implications for learning and teaching processes.

AI has transformed the educational system by providing strong innovative tools and technology that improve teaching and learning processes. Hence, its role in the creation of new intriguing education and different knowledge-sharing techniques has substantially boosted Zhao and Nazir (2022)

2.1 Pros and Cons of Artificial Intelligence

Nikita (2023) summarized some Artificial Intelligence benefits and drawbacks as follows :

2.1.1. Pros

- It reduces human mistakes.

- It never sleeps, thus it is available 24 hours a day, seven days a week.

- It is never boring, therefore it can readily do monotonous work.

- It is quick

2.1.2. Cons

- It is expensive to deploy and cannot replace human inventiveness.

- It will undoubtedly replace certain jobs, resulting in unemployment.

- It is possible for someone to grow unduly dependent on it

2.2. AI and English Language Learning

Many researchers have indicated the role of Artificial intelligence (AI) in learning English as a foreign language as (Wang, 2019; Gawate, 2019; Vera, 2023; Luo & Cheng, 2020). AI will be a critical component of the supplemental support system for English language learners and teachers to boost English language skills, Gawate (2019), Hamuddin et al. (2020) claimed that "AI can be used to improve speaking a foreign language when a native speaker of the foreign language is unavailable in the classroom context"(p. 6736). Mukhallafi (2020) pointed out that AI-based communication technologies contribute to the construction of learning contexts and the correction of letter and word pronunciation utilizing sound exercises and visual media. Alkinani (2021) highlighted the role of incorporating AI in enhancing communication skills, as learners feel more at ease and relaxed while communicating with computers rather than with people (Han, 2012). Additionally, Ai new technologies also have the potential to boost and promote students' writing, vocabulary, and grammar skills such as Quilbot, plagiarism checker, grammar checker, rewrite tools, and paraphrasers, etc. Walker et al. (2007) emphasize the AI's potential to generate texts on its own or to assist learners in composing and developing their writing tasks. (Nazari et al., 2021) further illustrated that some AI-based writing programs, such as plagiarism and grammar checkers, can provide an accurate and trustworthy summative and formative evaluation of writing performance.

Overall, by using and integrating machine learning algorithms, natural language processing, and data analytics, AI technologies have the potential to transform teaching and learning processes. AI-powered solutions may personalize and create lessons, provide quick feedback, and adapt to specific student needs, resulting in better educational outcomes. Additionally, AI can assist educators with courses and responsibilities such as grading and curriculum preparation. As AI improves, it will have a massive impact on education, changing the way we teach and learn.

2.3. AI tools used in Language Learning

Ghafar et al. (2023) highlighted some important AI technologies that can be used in learning English as follows :

2.3.1. Google translate

In a new language, Google Translate can define and pronounce words. Users can instantly translate traffic signs using the smartphone software "Translate." Websites can also be translated into some languages using Google Translate. Although Google has created several user tools, Google Translate,

which may be found at http://google.com/translatemay is the most important. According to Covili (2016), Google Translate has five advantages:

- Google Translate supports up to 50 different languages.

- Users can use Google Translate to translate complete documents.

- Google Translate can pronounce words in the new language as well as provide definitions.

- Users can translate street signs on the go by utilizing the "translate" mobile app.

- Google Translate can also translate websites into several different languages.

2.3.2. Text to speech (TTS)

Google Translate can convert text to speech**.** Google Translate now includes text-to-speech functionality. Google Translate's text-to-speech capability allows many languages to be spoken from words translated from other languages such as English. Google Translate's text-to-speech tool reads text with a less flat inflection and is smoother than the others. A Text-To-Speech (TTS) system can automatically transform text into speech by phonetization. Because the vocabulary of a TTS system is infinite, it can pronounce any word.

2.3.3. English ABLE

English ABLE, which stands for "Assessment-Based Learning Environment for English," is a setting in which students can learn grammar through assessment. Assessment information is used to steer instruction in assessment-based learning environments (ABLE) from a range of sources (e.g., formative and summative). English ABLE refers to a learning environment focusing on examinations to help English language learners (ELLs) learn about grammar in English. English ABLE builds fresh sets with updated tasks geared at specific ELL component abilities using a TOEFL CBT job library. An adaptive, scaffolded learning environment also provides packages for students to acquire aspects of English grammar.

2.3.4. Orai

Orai is an ideal tool for improving public speaking skills, serving as both a teacher and support system for educators. Orai is a program designed to assist students in becoming better English speakers. It tracks word usage and filler words and can be integrated into various English-speaking topics in the classroom as it is enjoyable to use. It provides practice sessions, progress tracking, and valuable insights for skill improvement.

2.3.5. English Learning Speech Assistant (ELSA)

It is a program that employs Artificial Intelligence (AI) and speech recognition to assist in the improvement and perfection of English pronunciation. The ELSA framework is designed to understand non-native speakers' speech patterns using voice data from persons speaking English with diverse accents, separating it from most other speech recognition technologies. An assessment test is administered to users to determine their degree of expertise and competence.

2.3.6. Chatbot

Chatbots, one of the artificially intelligent conversational systems, is the most recent technology developed to automatically engage with both people and computers. The new innovative constructed chatbot application will serve as a discussion partner for English students and teachers. Conversations can be done either verbally or in writing, thus the user should be able to practice both. This strategy allows users to become more comfortable with conversational English while also providing feedback on their performance and any mistakes they may have made

2.3.7. Duolingo

Duolingo is a website for learning foreign languages. It is a language learning application that employs a game-like approach to language learning by matching words and filling in the blanks in phrases. The goal of this method is to teach the grammar, words, and phrases required in a sentence. In terms of teaching and learning English, It allows any learner at any level of English to learn a new science. Duolingo first runs assessments to ensure that the learning materials obtained by users match their abilities. Duolingo users will know their English level after taking the test. Only then will Duolingo give English content tailored to the user's abilities.

2.3.8. NEO

Nexgen English Online Co., a California-based English application company, launched the NEO program, a global system for learning English. It is a cellphone-based integrated learning program that, through speech recognition and artificial intelligence, can adapt to the user's learning progress. Neo is an effective, adaptive, and straightforward solution for people who lead hectic lives. Neo also provides a one-of-a-kind experience for each user with an intuitive interface, an adaptive learning system based on globally recognized English technology, and certifications. Neo enables users to learn English more quickly as if they were accompanied by a personal expert teacher. Users will use the powerful speech recognition capability of the neo Study program to correct the pronunciation of each word until they are skilled in speaking English.

Vera (2023) mentioned other AI-Language assisted learning apps as :

2.3.9. Grammarly

is an artificial intelligence-powered writing helper that analyzes written content and provides real-time comments on grammar, spelling, punctuation, style, and clarity. It employs advanced AI algorithms to detect faults and improve trainees' writing skills.

2.3.10. Lingvist

 is an AI-powered language learning platform that customizes courses such as English. It tailors content to learners' abilities and learning styles, focusing on vocabulary development and efficient learning through spaced repetition. It also provides real-time feedback and data on progress.

2.3.11. Rosetta Stone

 is a well-known AI-powered language learning software that provides complete lessons in a variety of languages, including English. It employs artificial intelligence for interactive learning, speech recognition, and pronunciation feedback. Immersive learning is emphasized through images, music, and contextual exercises, making English learning exciting and natural.

In this current study, we aimed to check students' viswpoints and attitudes concerning the integration and the use of AI-assisted English language learning at the Department of English of Khenchela University.

3. Methodology

For this study, we opted for a descriptive study design to look into student's perspectives and viewpoints regarding the subject matter. A descriptive investigation was conducted to reveal and accurately depict the current situation. This method is well-known in the field of research for its ability to decipher and interpret events, evaluate them, and analyze participants' viewpoints on different subjects (Woods, 2005)

To gather the needed information for this study, a random sample of 50 students from the Department of English at Khenchela University who represented different academic years were administered a questionnaire during the academic year 2022-2023.

By utilizing a questionnaire-based methodology involving students' viewpoints and perspectives, this study aims to offer a comprehensive exploration of how the new digital AI technologies help and assist students in enhancing their English language acquisition within the Department of English at Khenchela University. The information gathered will deepen our understanding of the complex dynamics of AI technology and its prospective effects on academic outcomes.

4. Findings

The investigation of students' attitudes and viewpoints regarding AI-assisted English language learning has revealed a rich important tapestry of insights. We carefully analyzed the data to uncover the nuanced viewpoints that drive students' beliefs shedding light on the multifaceted relationship between students and AI technology in the realm of language education while providing a deeper understanding of the benefits, concerns, and preferences.

The scores are arranged using tables or graphs.

Item 1: Have you utilized AI technology or AI-assisted tools as part of your English language learning process?

Fig.1. The Use of AI Tools
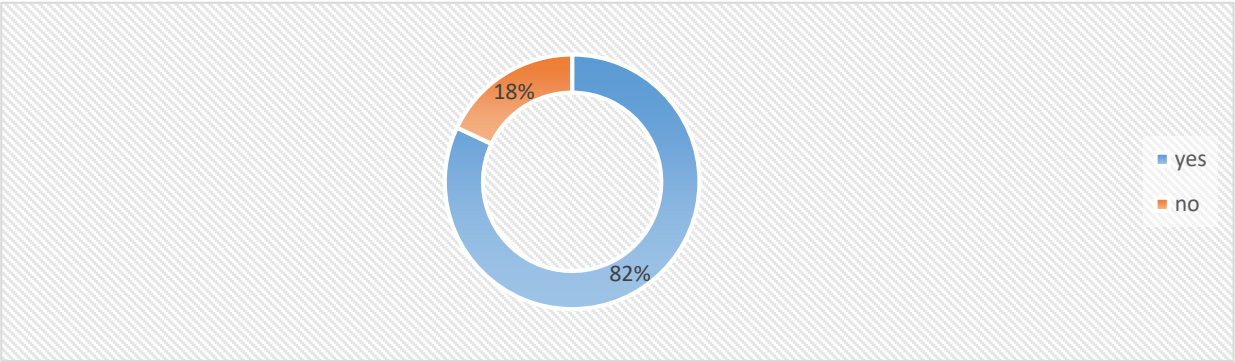
The question above yielded intriguing results, with 41 respondents confirming that they have used AI. This affirms that the majority of current University students are generally more tech-savvy and at ease using digital tools. Their exposure to and familiarity with AI tools and technologies has affected their decision to integrate these digital aids into their language learning process. In contrast, 9 participants indicated they have never utilized AI for learning. This could be linked to geographical limitations, such as living in rural locations with insufficient internet connectivity, which can greatly limit their capacity to exploit AI technology for language learning

Item 2: AI-assisted language learning makes learning English more engaging.

**Table 1.** Students' Engagement in Using AI Technologies

	Agree	**Disagree**
Participants number	43	7
Participants' frequency	86%	14%

As shown in the above table, the data significantly supports the claim that "AI-assisted language learning makes learning English more engaging." This view was agreed upon by an overwhelming majority of 43 respondents, highlighting the positive impact of AI in English language education.

These findings emphasize the potential of artificial intelligence to improve engagement through personalized, interactive, and adaptable learning experiences. While 7 students disagreed, it is important to note that the majority's substantial agreement highlights the prevailing positive attitude in favor of AI's role in making English language learning a more engaging and effective process

Item 3: AI can provide personalized learning experiences that cater to individual needs

Fig.2. AI in catering Individual Needs
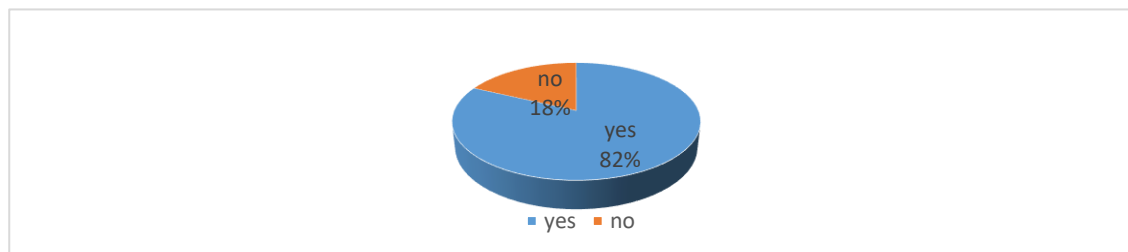
The data illustrated in the figure two overwhelmingly supports the claim that "AI can deliver personalized learning experiences tailored to individual needs." An impressive 46 respondents (87%) expressed positive agreement with the statement, indicating a strong consensus and belief regarding the efficacy of AI in customizing educational content to meet effectively students' needs. This considerable consensus underscores the potential promise of AI-assisted language learning personalization in education. Despite 4 participants expressing disagreement, the substantial majority in favor of AI's role in catering to personalized educational needs highlights a prevailing positive perspective and attitudes concerning the issue.

Item 4: Feeling comfortable when using AI technology for language learning

Fig.3. The Use of AI and Comfort
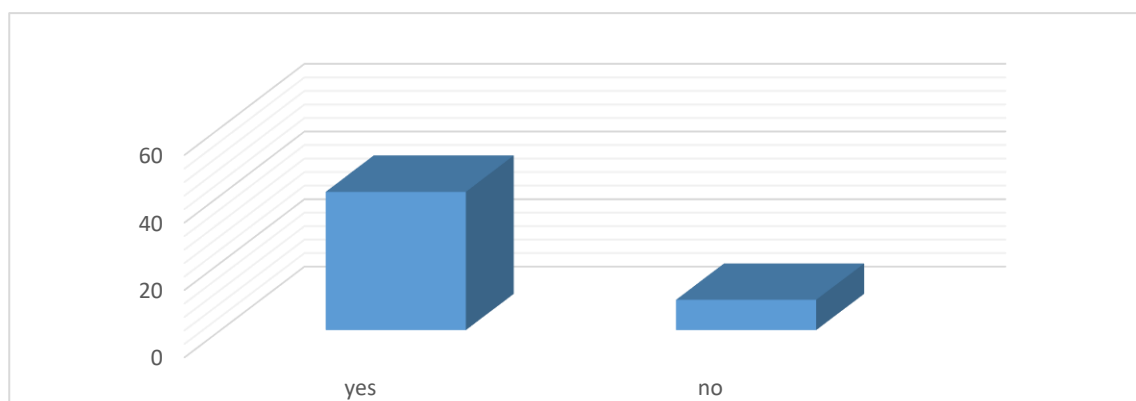
The statement "I feel comfortable using AI technology for language learning" garnered strong substantial approval and support from the participants engaged in the study, with 47 respondents indicating confidence and comfort with AI technology in English language learning contexts. This overwhelming agreement and consensus indicate a high level of acceptability, readiness, and confidence in the use of AI in language instruction. While only three respondents expressed discomfort, the overwhelming majority in favor demonstrates a general willingness to embrace AI as

a beneficial aid in the language acquisition process. These findings highlight the positive impression of AI's involvement in language teaching and its potential to facilitate comfortable and productive learning experiences.

Item 5: AI-assisted language learning helps me improve my English language skills more effectively.

Fig.4. AI and English Language Skills
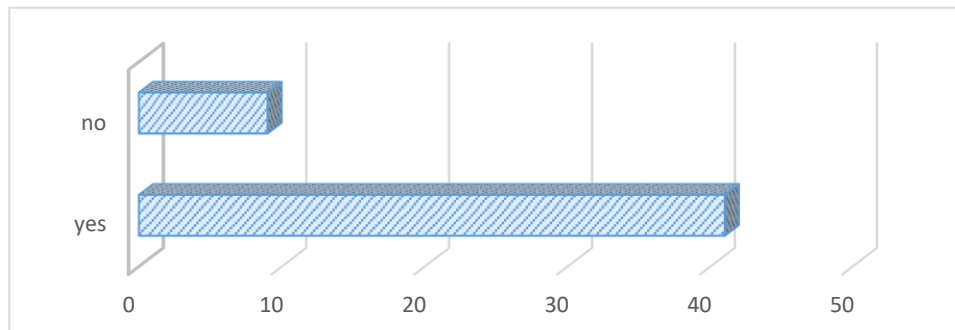
The statement "AI-assisted language learning helps me improve my English language skills more effectively" is crucial to the research as it serves as a pivotal focus concerning students' viewpoints and attitudes toward AI-assisted English language learning. The overwhelming favorable significant impact noticed in using AI for language improvement is highlighted by the overwhelming agreement from (45) respondents. This broad robust agreement implies that students usually see AI as a useful effective motivational tool for improving and boosting their English language skills. While (5) respondents disagreed, the majority's confirmation demonstrates the promise and potential of AI technology in promoting language proficiency, which is an important finding for the study's objectives.

Item 6: Have you found that the integration of AI technology in the English language learning process has influenced motivation and enthusiasm for language acquisition?/If yes, how?

Fig.5. AI and Students'Motivation
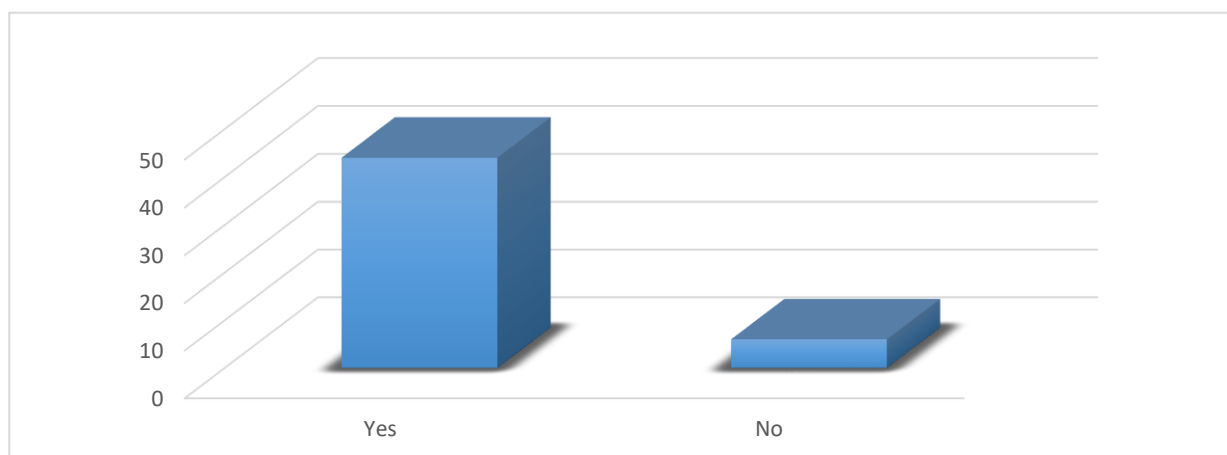
The above question received predominantly positive responses, with (44) participants responding positively with « yes » which confirms that the incorporation of AI digital technologies has had a favorable positive influence on their motivation and enthusiasm for language learning. Their affirmative responses indicate the potential of AI in enhancing learners' motivation, engagement, and interest, potentially through personalization, interactivity, and adaptability of the course materials. This, in turn, enhances learners' enthusiasm for language acquisition, making it an effective aid for boosting motivation in education. In contrast, (6) respondents said « no » which may be attributed to

various factors such as the lack of knowledge in using technology, the effectiveness of the AI tool used, or their personal learning preferences and styles.

Item 7: Are there any concerns or drawbacks you associate with using AI in language learning? Please explain.

In this question, students are invited to reflect on potential drawbacks of AI-assisted English language learning aiming to provide valuable insights into the challenges and limitations related to AI in language learning. The majority of students did not answer the question. Only four of them answered claiming that While AI offers valuable numerous advantages and benefits, some issues, difficulties, and concerns include the difficulty in using new updated digital technologies with a lack of training in using appropriate online aids, over-reliance on technology which hinders rapid improvements, and problems associated with data privacy and security.

Item 8: Are you with your overall experience using AI-assisted language learning tools

The results of the above question indicated that only (40) of the total participants answered this item. All the respondents responded positively in they confirmed that they were satisfied with their overall experience using AI-assisted language learning tools. This ensure that the vast majority of participants were pleased with their experience utilizing AI in language acquisition. Such a high degree of satisfaction shows that the use of AI technology has been generally beneficial and well-received by the students polled. It emphasizes the ability of AI-assisted language learning technologies to improve the whole educational experience, perhaps through individualized learning, interactivity, and convenience.

5. Discussion

The study's findings shed important light on students' attitudes about learning English with AI assistance. Most students view AI as a helpful supplement addition to their language learning process. Students seem to value the individualized learning opportunities that AI provides, based on the high degree of agreement with comments about engagement and usefulness of AI technologies. Additionally, their replies show how beneficial AI can be for improving language abilities since students mention how convenient and accessible it is.

The majority of students' satisfaction is consistent with the potential benefits of AI in English language acquisition. AI technologies excel at personalizing learning experiences by adapting information to individual needs, skill levels, and learning styles. AI-powered technologies' adaptability and interactivity help to enhance students' engagement, as students find themselves actively engaged in courses, quizzes, and interactive activities. Hence, educators may provide students with very rapid support, material, and guidance outside of the classroom using different innovative AI-powered tools such as chatbots and virtual assistants, allowing them to stay engaged and motivated in learning.

AI digital aids provide real-time feedback on different language skills as pronunciation, grammar, and vocabulary, allowing students to track their progress and improve in real time. Furthermore, the 24/7 accessibility of AI-driven platforms allows learners to study at their speed and effortlessly integrate language learning into their daily routines.

Students' positive replies show that AI technology can also be used to motivate language acquisition. Additionally, AI technology creates a non-judgmental environment in which learners can practice without fear, improving their confidence and fostering deeper engagement with the language.

Finally, the overwhelming favorable reactions from students about their satisfaction and positive attitudes regarding AI-assisted English language learning tools highlight the huge benefits and possibilities of AI integration in education. These findings demonstrate AI's ability to tailor learning, increase engagement, improve efficiency, and boost learners' motivation and confidence. As AI

advances, it holds great promise for transforming language instruction, making it more accessible and fun for students of all backgrounds and competence levels. Future research and development should focus on maximizing the potential of AI to improve language learning results.

6. Conclusion

In conclusion, this study demonstrates useful clear trends and insights into students' opinions toward the integration of AI-assisted English language learning. Students' overwhelming favorable replies highlight AI's significant promise in language teaching, including its ability to improve personalization, interactivity, efficiency, motivation, and confidence in the language learning process. The findings highlight AI technology's disruptive potential in education, particularly in the context of language acquisition as it meets and caters to different students' different personal learning styles. However, while embracing the hopeful aspects of artificial intelligence technology in education, it is equally critical to alert and address potential issues, obstacles, and limitations as technology evolves.

Bibliography List

Alkinani, E. A. (2021). Factors affecting the use of information communication technology in teaching and learning in Saudi Arabia universities. *Psychology and Education Journal*, *58*(1), 1012-1022.

Covili, J. J. (2016). *Going Google: Powerful tools for 21st century learning*. Corwin Press.

Fitria, T. N. (2021). The use technology based on artificial intelligence in English teaching and learning. *ELT Echo: The Journal of English Language Teaching in Foreign Language Context*, *6*(2), 213-223.

Junaidi, Hamuddin, B, Julita, K, Rahman, F, Derin, T. (2020). Artificial Intelligence in EFL Context: Rising Students' Speaking Performance with Lyra Virtual Assistance. *International Journal of Advanced Science and Technology*, *29*(05), 6735 - 6741. Retrieved from http://sersc.org/journals/index.php/IJAST/article/view/17726

Han, J. (2012). Emerging technologies ROBOT assisted language learning. Language Learning and Technology, 16(3). Retreived from :

https://www.researchgate.net/publication/286049847_Emerging_technologies_ROBOT_assisted_language_learning/citations

Ghafar, Z. N., Salh, H. F., Abdulrahim, M. A., Farxha, S. S., Arf, S. F., & Rahim, R. I. (2023). The Role of Artificial Intelligence Technology on English Language Learning: A Literature Review. *Canadian Journal of Language and Literature Studies*, *3*(2), 17-31.

Gawate, S. P. (2019). Artificial Intelligence (AI) based instructional programs in teaching-learning of English language. *International Journal of English Language, Literature and Translation Studies*, *6*(4), 69-73.

Kaur, J., & Gill, N. S. (2019). *Artificial Intelligence and deep learning for decision makers: a growth hacker's guide to cutting edge technologies*. BPB Publications.

Luo, M., & Cheng, L. (2020, July). Exploration of interactive foreign language teaching mode based on artificial intelligence. In *2020 International Conference on Computer Vision, Image and Deep Learning (CVIDL)* (pp. 285-290). IEEE.

https://doi.org/10.1109/CVIDL51233.2020.00-84

Mukhallafi, T. R. al. (2020). Using Artificial Intelligence for Developing English Language Teaching/Learning: An Analytical Study from University Students' Perspective. International Journal of English Linguistics, 10(6). https://doi.org/10.5539/ijel.v10n6p40

Nazari, N., Shabbir, M. S., & Setiawan, R. (2021). Application of Artificial Intelligence powered digital writing assistant in higher education: randomized controlled trial. Heliyon, 7(5). https://doi.org/10.1016/j.heliyon.2021.e07014

Underwood, J., Luckin, R., (2011). What is AIED and why does Education need it?. [PDF]. Retrieved from https://www.researchgate.net/publication/241698223_What_is_AIED_and_why_does_Education_need_it

Nikita, D.(2023). What is Artificial Intelligence: Types, History, and Future. Retrieved from : https://www.simplilearn.com/tutorials/artificial-intelligence-tutorial/what-is-artificial-intelligence

Walker, M. A., Stent, A., Mairesse, F., & Prasad, R. (2007). Individual and domain adaptation in sentence planning for dialogue. *Journal of Artificial Intelligence Research*, *30*, 413-456.

Wang, R. (2019, June). Research on artificial intelligence promoting English learning change. In *3rd international conference on economics and management, education, humanities and social sciences (EMEHSS 2019)* (pp. 392-395). Atlantis Press.

Woods, P. (2005). Successful writing for qualitative researchers (2nd edition). Abingdon, Oxon, UK: Routledge.

Vera, F. (2023). Integrating Artificial Intelligence (AI) in the EFL Classroom: Benefits and Challenges. *Transformar*, *4*(2), 66-77.

Zhao, Q., & Nazir, S. (2022). English Multimode Production and Usage by Artificial Intelligence and Online Reading for Sustaining Effectiveness. *Mobile Information Systems*, *2022*.