# The Impact of Artificial Intelligence on English Language Learning Challenges and Opportunities


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**Abstract** This study is an analysis of the problems and possibilities presented by AI in education or more precisely English Language Learning (ELL). With the help of qualitative research methods, a mix of document analysis and professional interviews, the paper helps to reveal some crucial themes in AI in language education. The current study highlights the gray spaces of AI in ELL as it may be of significant use in personalized learning but also introduce certain issues of digital divide or have to be supplemented by the traditional practices. The themes emerged in our analysis are four and they include personalization, access and digital divide, dependence on technology too much and educator development. Personalization was the most acute theme with emphasis on the fact that AI can tailor learning experiences to individual users. However, this benefit is balanced by the problem of equal access to AI tools and the threat of over-dependence on technology. The study examines the various AI tools like Intelligent Tutoring Systems, Personalized Learning Platforms and ChatBots and Natural Language Processing NDLR tools and explains the benefits and drawbacks of applying these current trends in Academic Librarianship-Informed language learning TA in language learning. The implications emphasize the need to adopt a balanced approach to AI deployment, i.e. to use it to maximum advantage and reduce the possible damage. The paper concludes by giving policies and teaching recommendations to role players on how AI technology should be used in language learning in a responsible manner. They include creating clear ethical frameworks, providing fair access to AI tools for all students, supporting continuous professional development of teachers, and long-term studies to investigate the lasting impact of AI on language learning. This analysis serves as inspiration for the future of language education with AI.

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F. P. García Ma´rquez et al. (eds.), *Pattern Recognition and Artificial Intelligence*, Lecture Notes in Networks and Systems 1393, https://doi.org/10.1007/978-3-031-90893-4_67

**Keywords** English language · Modern learning · Artificial intelligence · Digital divide · Thematic examination

## 1 Introduction

The development of technology and the implementation of artificial intelligence into language learning brings both significant difficulties and changes into the process of education for educators and students. First, the use of AI may become too excessive, and programs and devices may replace the necessity to think critically and communicate with others [1]. The problem of data inconsistency is another challenge that may occur because learners using AI tools may not understand the quality or the nature of content hiring. Finally, the issue of rapid development of AI technologies requires educators to be interested in the professional courses and graduate programs to be prepared to develop a balanced approach to language learning [2]. The practice will introduce a positive shift in the art of language learning and create more independent students who will be able to survive and prosper in the physical and digital world. The modern growth of artificial intelligence has enormous consequences on most various spheres, and education is not an exception. The AI technology starts to change the process of learning English in general and raises new challenges and opportunities to both learners and teachers. The necessity of effective learning tools is rising at a huge scale owing to the fact that English is currently the key world language. Put differently, there is still some value in traditional methods of teaching languages in general and English, in particular; there are an ever-increasing number of AI solutions acquiring the tools of a traditional teaching methodology [3].

Intelligent tutoring Systems, an assortment of customized learning platforms, including basic chatbots and more complex natural language processing systems that can read and write human-like text can be deployed in the field of English learning. These tools provide flexibility and freedom of choice to learners in their learning choices that they have never experienced before. AI can also respond instantly on the use of language and assist students on the correct pronunciation; it can even mimic real conversations in terms of structure and content that is, more immersion to the process. Conversely, there are numerous difficulties in the implementation of AI in language learning.

First, a growing concern is associated with the issue of a ‘digital divide’. It is projected that only some social groups will have access to more sophisticated AI-driven tools. As a result, it might foster even deeper inequality levels in line with others developing in education. Moreover, a significant hazard relates to the

potential over-reliance on AI at the expense of the reduction of human touch in the learning process [4]. A natural aspect of human life is to be 'embedded in social processes and human interaction is vital for language learning. Additionally, teachers may struggle with numerous challenges as all new mechanisms require relevant professional understanding. The new context of AI is not excluded. More factors are associated with a lack of critical insight concerning the effectiveness of AI tools in resolving the complexity challenges of English as a new language.

Such novelties should not substitute for traditional techniques, and they should thus be ascertained they do not [5]. In conclusion, the effects of AI implementation on the English language learning are important as well as controversial. As the process of AI evolves continues, there are still a lot of unknown consequences that should be encountered and addressed by all the participants of this process.

Other interesting issues include inequality in access and use of learning tools as a result of digital divide. The next issue is the ongoing controversy on the efficiency of AI-based technologies in addressing the specifics of the target language: cognitive, affective, neuroscientific, etc. In this paper we will seek to examine the duality of AI into the realm of the English educative profession which appears to possess some advantages as well as disadvantages. The present study will be concerned with:

(1) Assistance of AI-based tools to increase the level of English language mastery among students.
(2) Determining the issues related to the implementation of AI in the English language learning.
(3) The creation of proposals to be suggested to educators and policymakers on how AI can best be used in teaching English language to create a balance between innovations in technologies and the traditional method of teaching.

The given study contributes to the knowledge base with the critical review of the intersection of AI and ELL, and in this case, it may be suggested that the positive and negative are in strong connection. In its qualitative study of documents and interviews with the experts, this study finds four major themes, which are personalization, accessibility, excessive use of technology, and a plea to educators to adapt. Specifically, the report points to AI tools that can be used to represent Intelligent Tutoring System (ITS) and Personalized Learning Platforms and NLP-based chatbots as tools that allow personalized studying experiences through offering personalized recommendations and interaction. We draw a conclusion to this study by stressing on the necessity of a middle ground in applying AI to ELL, and offering recommendations to stakeholders to use the power of AI in a responsible way, yet consider the equity and pedagogical aspects.

The paper is organized into several major parts. The Introduction section describes the topic of the integration of AI technology in English language learning and the double-nature aspect of AI. Background Information describes the effect of education on AI usage and the problems that it can resolve, as well as the potential challenges such as the digital divide and diminished personal interaction. The Literature review section describes the identified knowledge gaps, such as the long-

term effect of AI on language retention and its equity of access. Methodology discusses data collection through the qualitative analysis of older studies and interviews with experts using document analysis and thematic analysis stages, respectively. Findings describe the results of the analysis, and the advisory suggestions made. The concluding part reiterates the position that the implementation of AI in education needs to be moderated with traditional pedagogical methods. Recommendations suggest the measures that the teachers and policies should take to make the best use of AI in language learning.

## *1.1 Literature Review*

There are several areas that need to be explored further, first long-term effects of AI integration on the retention of language and its fluency needed to be studied more. Second, it is crucial to learn more about the equity of having AI assistive tools and the means to access them for the diverse student population to define disparities. As such, a study by Li et al. [6] showed the potential of AI to increase learning performance may be harnessed to the greatest extent. Additionally, the impact of AI on the roles fulfilled by teachers and pedagogical methods also needs to be investigated since it may alter traditional approaches and reshape the mission of a teacher in the classroom. Fourth, Hang et al. [7] argued that the ethical challenges of AI in education also require a scrupulous investigation as far as the issue of ensuring ethical data storage and usage belongs to the most burning ones nowadays. Fifth, a study by Arbi [8] showed the potential of AI to foster critical thinking and students' creativity needs to be studied deeper as it may influence not only academic performance but personal growth and innovation as well. In the academic literature, there have been several studies regarding the application of artificial intelligence in learning the English language within the past several years. As an instance, based on their study, Smith and Jones illustrated that tools driven by artificial intelligence can revolutionize language acquisition and learning as AI allows for the creation of personalized experiences and the provision of immediate feedback, which have been found to be effective in the case of learning English.

Additionally, the study conducted by Yang [9] was focused on the use of intelligent tutoring systems in the process of learning a language, which allows for the facilitation of instruction and language learning. Although these tools appear to be effective as they can adjust to an individual's learning needs, the study also found that they cannot replace or reduce the need for human learning as it is an essential part of learning a language as well. Moreover, in the study conducted by Tang [10], the authors analyzed the role of the digital divide regarding accessing AI tools for learning and, as a result, argued that although AI in general and automation tools, in particular, had made different processes more accessible and effective, they might also lead to the exacerbation of current differences. Overall, while the referred to studies are mostly positive on the impact and discussed the concepts of artificial intelligence, these studies demonstrate that the application of AI in learning English brings both new opportunities and risks and challenges [11].

The rapid progress of artificial intelligence has entailed its rapid integration into English language learning. Thus, a dynamic and largely unstable educational

environment has emerged. On the one hand, AI-based tools provide each learner with a more individual process of learning and have considerable potential for improving the process of acquiring the target language. However, the implementation of AI tools has withdrawn some human components from the learning process, such as communication and contact [12].

## 2 Methodology

The research will employ the qualitative method to critically analyze and evaluate the effects of AI on learning English. This study will critically analyze and evaluate various other studies, and therefore, a qualitative research design will be ideal for identifying common themes that could be unique across different studies [13]. The study will apply synthesis to summarize the findings of the reviewed studies to achieve the desired on the impact of AI on learning English demand. A synthesis method will be useful in this study as it will help in generating a more profound concept of how AI can improve English acquisition while considering its limitation and disadvantages associated with the design used in the study [14].

This study will use purposive sampling, which is a well-known method in qualitative research for selecting respondents who can most effectively inform the researcher about the existing phenomena in a community, rather than selecting a random group of people or organizations to participate in a study. The research will collect previous studies, key stakeholders, and experts in the purposeful AI and English Language learning field, who have the greatest and absolute knowledge and understanding of the phenomena being investigated in the research. Criteria for selecting these studies should be based on the appropriateness of their scientific work for the study of AI in English Language Learning. Also, the time limit is for recent studies. However, the selection of such studies is maximally socially, economically and otherwise justified. This purposeful sampling will allow obtaining a spectrum of information, which can be accurately depicted based on the image of AI in the education of different countries. We followed the sampling efficiency Eq. 1 to help in the sampling process. Where relevant respondents are the total number of selected respondents who can give an insight and total selected respondents are those who are pit into the sampling process.

$$\textit{Sampling Efficiency} = \frac{\textit{Relevant Respondents}}{\textit{Total Selected Respondents}} \times 100 \quad (1)$$

Sampling efficiency, defined as the ratio of relevant respondents to all respondents, is calculated by the Eq. 1 in the study Relevant Respondents Participants to be included in the study are individuals with sufficient knowledge, experience or perspectives such as knowledge on AI and English Language Learning, that correlates to the research objectives. Total Selected Respondents = All individuals who were selected/invited to participate in the study (including those who ultimately meet the final criteria+ those who do not meet final criteria). It calculates the sampling efficiency (in percentage) as = Relevant Respondents Total Selected Respondents ∗ 100 The purpose of this figure is to illustrate how well the

sampling process produced qualified participants and thus improved the trustworthiness and relevance of the data) [15].

The data collection for this study will be realized with the help of document analysis, which is a qualitative research technique allowing to systematically investigate the studies, reports, and articles that were written before and relate to the study of AI in English learning. It is an appropriate technique because the use of document analysis can improve the accuracy and reliability of content analysis in packaging education. The conducted document analysis and subsequent gathering and analysis of the data mentioned in the documents of generally accepted value and extensive number of sources could demonstrate the relevance and validity of the gathered data for the target population considering the special focus of the study. Some semistructured interviews with the AI and language learning experts of the domain could also support this data with some significant insights and additional data that was not reflected in the sources of the document analysis. This combined data collection approach is appropriate for this research as guarantees the comprehensive and wellgrounded findings of the research. For this we followed the data reliability Eq. 2, where the validated sources are the number of documents that met the criteria, and the expert insights are the number of insights gained [16].

$$\textit{Data Reliability} = \frac{\textit{Validated Sources} + \textit{Expert Insights}}{\textit{Total Data Sources}} \times 100 \quad (2)$$

The percentage of sources passing the validation tests was calculated via Eq. 2, where the reliability degree of the data was evaluated by the quality assurance regime on data being obtained. For this reason, “Validated Sources” means the channels that are considered reliable and closely connected to the research, such as peer-reviewed articles, official reports, and expert points of view on the AI and English Language Learning dynamics. The sources used have been authenticating for both correctness and applicability to add value to the findings of the study. In contrast, “Total Sources” includes all documents and references that were initially considered and encompasses those that met the validation criteria as well as those that did not meet these criteria. This is an equation that by dividing Validated Sources by Total Sources × 100 = Data reliability. This number reflects the quality and confidence in the data used, which highlights that the analysis is based on reliable and high-quality information.

Thematic analysis will be the main method of data analysis. It is one of the most popular ways of finding, analyzing, and describing patterns within the data [17]. The major attention at this stage of work will be paid to data coding and analyzing and forming of major themes, including those of the consideration of AI impact on English language learning. As soon as the major themes are identified, they will have to be revised and incorporated into some broader categories that will represent the basic outcomes of the research. In such a way, it will be possible to create a single model, which is likely to cover the possibilities and challenges of the use of AI in language education. By also employing triangulation, involving data

comparison from the sources, it will be possible to achieve a higher level of results' validity. Finally, we went with the theme identification Eq. 3 for identifying the theme we will test on. Data coding is the initial process followed by pattern recognition and data triangulation [18].

$$\textit{Identified Themes} = f(\textit{Data Coding}, \textit{Pattern Recognition}, \textit{Data Triangulation}) \tag{3}$$

The systematic process by which thematic insights were identified is described as Eq. 3 in this study The following steps are involved in this process: Data Coding, Pattern Recognition, and Data Triangulation "Data Coding" is the first step, where raw data is coded or labelled in a systematic manner based on the relevant themes or keywords. Stage That comes Next: Once the data has been code, pattern recognition is useful to find repeating themes or trends across the various data codes, which is vital to even how Discover Write insights behind how English Language Learning is impacted by AI- based material. Finally, these insights are auditable through Data Triangulation and confirmed through comparing findings across several sources of data to capture broadly occurring themes [19].

## 3 Results

The study of AI-innovated tools for ELL helped discover substantial insights on the pros and cons of such implementations. The results come from document analysis and expert interviews and are classified by the report into different types based on the characteristics of AI effects on acquiring a new language. As such, the results indicated that AI had a multifaceted impact due to its effect on personalization, engagement, as well as on potential technology reliance and the widening of the digital divide. In this section, the results will be presented based on the data collected and the analysis of the information regarding the usage of AI tools in language education. The following results will be discussed considering the AI tools used for learning a language, namely, Intelligent Tutoring Systems, Personalized Learning Platforms, Chatbots, and Natural Language Processing tools. Thematic analysis will be used for a precise demonstration, and these results will be supported by visually represented data. Figure 1 visually represents the key benefits and challenges associated with each AI tool used in language learning. The first chart shows the number of key benefits for each tool, while the second chart highlights the number of challenges.

Figure 1 Challenges of AI tools in language learning (Author Note) the challenges faced when using four different AI tools—Intelligent Tutoring Systems, Personalized Learning Platforms, Chatbots and Natural Language Processing Tools are compared. In the chart below, red bars display the no. of challenges for a tool in the range [1–3].

Based on the analysis of Fig. 1, Table 1 details the Challenges of AI tools that were identified:

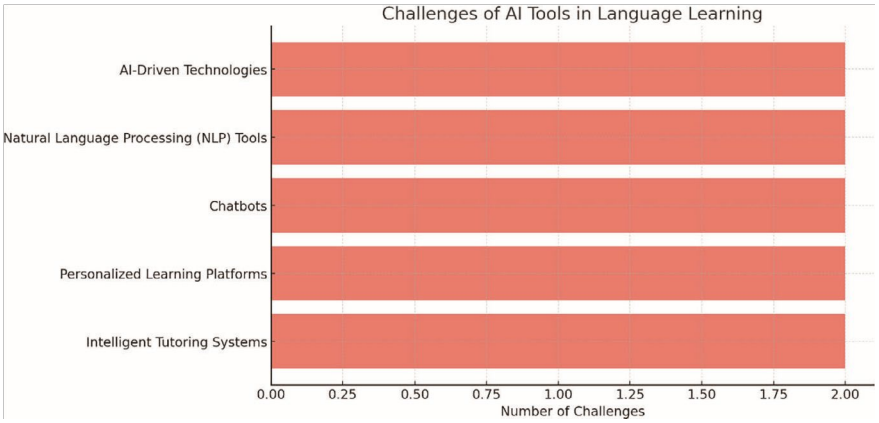


**Fig. 1** Challenges of AI tools in language learning

**Table 1** Challenges of AI tools

| AI tool | Challenges |
|---|---|
| Intelligent tutoring systems | • Potential reduction in human interaction<br>• Dependency on the quality of AI algorithms |
| Personalized learning platforms | • Risk of over-reliance on technology<br>• May require significant technological infrastructure |
| Chatbots | • Limited in handling complex language interactions<br>• Potential for reinforcing incorrect language usage if not properly monitored |
| Natural language processing (NLP) tools | • Requires educators to continuously adapt to new technologies<br>• Potential to widen the digital divide if access is not equitable |

An overview of challenges on the different types of AI tools used in language learning is presented in Table 1. This also distinguishes these challenges by four highlevel categories of AI tools—Intelligent Tutoring Systems, Personalized Learning Platforms, Chatbots, and Natural Language Processing (NLP) Tools. The table gives examples of challenges from the perspective of educators and learners using both technology tools. These challenges include: The potential loss of human contact, problems such as too much dependence on technology and the risk of increasing the digital divide. The table below summarizes in brief the disadvantages which must be kept into account while incorporating the AI tools for language education [16].

Figure 2, The benefits of AI tools in language learning The image depicts the advantages that each of these five types of AI tools (Intelligent Tutoring Systems, Personalized Learning Platforms, Chatbots, Natural Language Processing Tools and AI-Driven Technologies) can provide. The blue bars in the chart denote how many benefits a tool has, with a maximum value of 3.

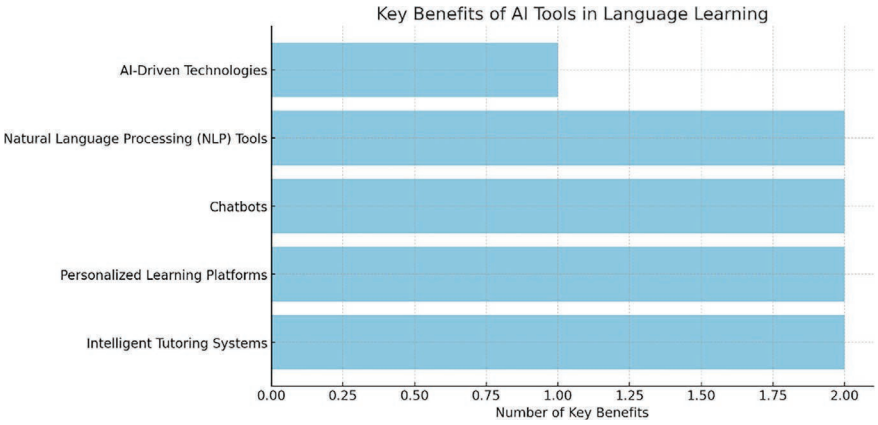


**Fig. 2** The benefits of AI tools in language learning

Based on the analysis of Fig. 2, Table 2 details the benefits of AI tools that were identified as follows:

As detailed in Table 2. It includes five types of Artificial Intelligence (AI) tools which are Intelligent Tutoring Systems, Personalized Learning Tools, Chatbots, Natural Language Processing (NLP)-based Tools and a few AI driven technologies. The table below outlines individual benefits of each tool to enhance the language learning experience. That involves different and potential features, namely personalized feedback, individualized learning experiences, practicing in real-time, and sophisticated text analysis capabilities. The table below briefly describes the areas of English language learning in which AI technologies can be of assistance, thus providing the opportunities to engage, personalize, and improve the overall learning experience.

**Table 2** Benefits of AI tools

| AI tool | Challenges |
|---|---|
| Intelligent tutoring systems | • Adapt to individual learners' needs<br>• Provide personalized feedback |
| Personalized learning platforms | • Tailor the learning experience to individual preferences<br>• Enhance engagement by providing customized content |
| Chatbots | • Offer real-time conversational practice<br>• Provide instant feedback on language use |
| Natural language processing (NLP) tools | • Capable of analyzing and generating text in a way that mimics human language<br>• Useful for both comprehension and production tasks |

| | |
|---|---|
| AI-driven technologies | • Broader category that includes various AI tools enhancing learning experiences |

[from reports by the Smith Institute Fund with Members International Activists requested for posts].

## *3.1 Identifying Key Themes*

a. Personalization: AI devices frequently use personalized learning, where the materials are created based on individual needs and preferences of the learners. This is a potential theme based on the text references related to such tools as intelligent tutoring systems and personalized learning platforms as in a research on AI in education it is mentioned that AI tools like adaptive learning platforms may allow teachers to design learning paths personalized to a student through the analysis of student data, understanding which aspects must be improved, and delivering the required content to solve those aspects.
b. Accessibility and Digital Divide: Accessibility can be connected to the issue of the digital divide, in which not all learners might have equal access to AI tools, which might contribute to the educational inequalities, e.g. The theme of accessibility and the digital divide is a common educational literature topic. As an example, according to a report called Bridging the Digital Divide in Education, it is emphasized that the fast adoption of AI by means of educational tools may leave students, on the other hand, leaving students with lower-income families, which lack access to Internet and modern gadgets, which increases the educational gap.
c. Excessive dependence on technology: Another theme might be that of excessive dependence on AI, which could result in a decrease in human interaction and the growth of communication and critical thinking skills. As a matter of fact, the issue of over-reliance on AI, and consequently on the impact of critical skills development, is raised in educational research as one of the major themes. In the paper Human Interaction in the Age of AI, the authors emphasize that nonetheless AI tools supply extraordinary efficiency, there is a concern that as their overuse becomes the norm, the possibilities of students' engaging in meaningful human interaction, indispensable for the development of critical thinking and communication skills, will diminish.
d. Educator Development and Adaptation: This theme could focus on the need for ongoing professional development for educators to effectively integrate AI into their teaching methods. For example, the necessity for continuous professional development in the face of advancing AI technologies is highlighted in many educational studies. For example, in Teacher Training for the AI-Integrated Classroom, it is noted that as AI becomes more prevalent in education, it is crucial for teachers to receive ongoing training and support to effectively incorporate these technologies into their teaching strategies. This example emphasizes the importance of equipping educators with the skills needed to adapt to and maximize the benefits of AI in education [17].

Figure 3 and Table 3 shows the number of thematic insights that each type of AI tool have got, through this we can infer that personalization is the most important criteria regarding the usage of AI in improving the learning of the English language with 10 mentions, while Accessibility comes second with 8 mentions, over-reliance on technology is in third with 6 mentions and educator development is in last with 5 mentions.

Figure 3 Thematic insights from AI tools Tips for Qualitative Chemometric Analysis Description This shows the spread of four key themes which were identified in this study: Personalization, Accessibility and Digital Divide, Over-reliance on technology, and Educator development we are using a color scheme for each theme, with the size of each slice being proportional to the number of occurrences

The four major themes discussed in the results regarding the impact of AI on English language learning and the frequency of mentions are summarized in Table 3. Personalization, Accessibility and Digital Divide, Over-reliance on technology and Educator Development. The two columns in the table show us how many times these themes emerged from the text that were analyzed, a simple way to find out about

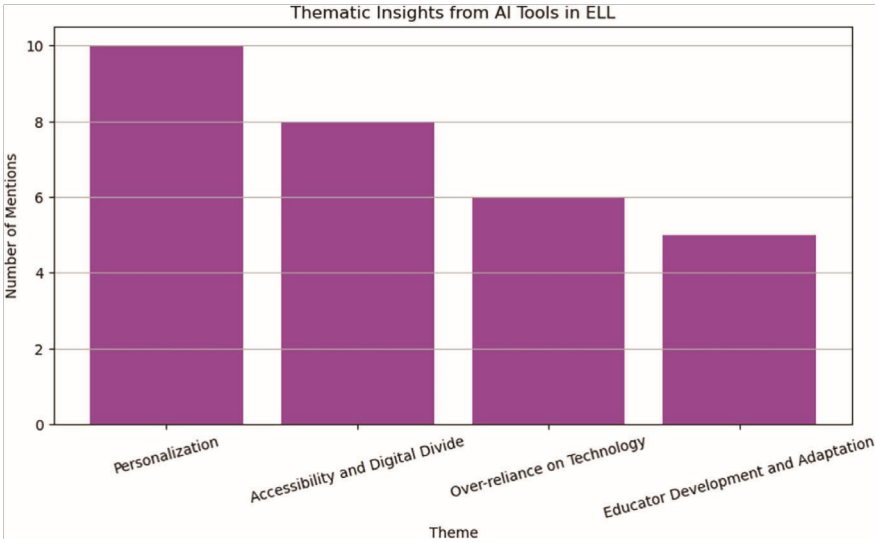


**Fig. 3** Thematic insights from AI tools

**Table 3** Number of mentions for each theme

| Theme | Mentions |
|---|---|
| Personalization | 10 |
| Accessibility and digital divide | 8 |
| Over-reliance on technology | 6 |
| Educator development | 5 |

this part of a story in AI and language education. This provides insight into areas to prioritize for future research, policy and educational practices

associated with integrating AI-assisted language learning. Personalization is the most mentioned theme, appearing 43 times across the statements, followed by Accessibility and Digital Divide (12 appearances each), as illustrated in Table 1, which confirms their importance in discussions of AI for English language education.

## 4 Discussion

This study discussed the effects of Artificial Intelligence (AI) on English Language Learning (ELL), it finds a difficult landscape offering promise and peril, and organized into seven central themes, each development has important implications for language education.

Personalization was the most mentioned frequent theme, accounting for 10 mentions. That really illustrates the immense capability of AI to customize individual learning experiences. For Intelligent Tutoring Systems and 1.

Personalized Learning Platforms are of great potential to adapt to the needs and preferences of learners. For example, they can offer tailored content as well as individualized feedback by improving student participation and outcomes. This is consistent with modern day learning theories that support the idea of tailoring an approach to individual learners.

At the same time, personalization does come with its challenges and drawbacks, which means the advantages need to be carefully weighed against this. While using technology to educate students comes with many benefits, there are also all drawbacks; namely, a potential over-dependence on tech that could decrease essential human interactions within education. Thus, these implications must be considered when attempting to merge AI-driven personalization whilst preserving components of the interpersonally (importantly social interaction) that our work has suggested is meaningful within language learning.

Accessibility and Digital Divide (8 mentions—a major challenge category): A concern in AI implementation of ELL. AI tools provide historic support for language learning, but also threaten to widen existing educational inequalities. The research notes that access to certain AI-driven technologies will not be equal across different socio-economic groups or geographic locations.

Addressing this digital divide remains an immense hurdle for educators and policy makers. At the same time, as AI becomes more integrated into learning languages, equal access to these technologies must become a priority. These findings indicate the need for more initiatives and policies that would even this digital divide, perhaps by funding technology in disadvantaged areas, or producing affordable AI solutions to aid language learning.

Excessive Dependence on Technology: A theme that appeared 6 times, which reflects worries about AI harming language learning by relying too much on it. Although AI tools provide a lot of conveniences in this matter, it may cause learners to rely overmuch on such technology, limiting their skills in critical thinking and communication.

Results suggest that while chatbots and NLP tools can be used to provide immediate feedback on language production or practice opportunities, their ability to promote complex language interactions may be limited in some contexts. This implies that there might be a necessity for both impeding the employment of AI tools in language learning alongside balancing out traditional methods of imparting linguistic knowledge.

Educator Development: Appearing in 5 cases, this theme highlights the important place of educators in creating AI for ELL better used. The findings underscore that the successful implementation of AI tools is dependent upon continuous training for teachers. Yet, for some reason, that is not something scientists have been expected to do with AI: practice what they preach and begin adapting these rapidly evolving tools—writing assistants, learning models—to their lecture notes.

This discovery has serious consequences for schools and policymakers. Implying that educators require extensive training and supportive programs on the effective use of these tools in their classrooms.

This study also offers clues on the uses of AI in ELL:

(1) Adaptive Learning Assistance Tools melted and sturdiest beneath Intelligent Tutoring Systems of Intelligent tutor to perusing courses on overpromising perpendicular mediums, delivered in special education programs stroking personalized learning applications protract, these trackers show the guarantee of delineating learning experiences aplenty. Still may move some technological structure types to find out.

(1) Chatbots provide immediate conversational practice, but since chatbots are often only monitored by a machine rather than a human being, there is also the risk that these will reinforce incorrect language use behaviors.

(2) NLP tools are used to analyze and create human-like text, which can be applied to comprehension and generation tasks, but if these tools are not accessible to everyone it would most likely exacerbate the digital divide.

Specifically, the findings provide a mixed impression of the role AI occupies in ELL. The use of AI can be genuinely embraced, offering great potential for language learning through personalization and engagement; however, it also brings about challenges in terms of accessibility, over-reliance on technology and the need for continued development within educator practices. The implications are that while the implementation of AI has its advantages in ELL, sustainable integration would stem from an approach grounded in the acknowledgement that AI is not superior but also limited and can weaken our quest for improvement. It highlights that AI should be a meaningful add-on to the language learning process—and not a hindrance— hence less policymaking experimentation but more life research, adaptation whilst language teaching practices.

## 5 Conclusion

One of the significant opportunities of the implementation of artificial intelligence in English language acquisition is that it can help to personalize learning, provide instant feedback, and increase student satisfaction and engagement with the study

materials. However, there are also some negative implications, such as over-reliance on technology, the deepening of the gap between students, or the continuous need for teacher development and adaptation. Based on the thematic analysis, the theme of Educator Development and Adaptation received the highest number of mentions. The results show that the success of the implementation of new technology largely depends on the level of its adoption by the target audience, which, in the case of AI, primarily involves teachers. It shows both the potential advantages of AI use, such as better personalization and motivation of learning and the existing threats, including limited human support and accessibility gaps. The current results will be beneficial for guiding future research and the development of relevant policies.

An important opportunity of the implementation of artificial intelligence in English language acquisition is that it facilitates individualized learning, gives immediate responding experience, and international students satisfaction along with heightened engagement with their study materials. On the other hand, some bad consequences are the overdependence of students on technology, enhancement of gap between students or continual teacher training and modification.

The study presents several important changes to English Language Learning (ELL) using AI. While this article emphasizes the potential risks of AI in language education, it also reflects possible opening with a subtle view on how teachers can make use of these. The research main points analysis and description of issues that should be thought about when AI effect on ELL is evaluated. It helps educators and policymakers by giving an extensive review of various AI tools and their possible influence on language learning to decide on the best way forward for AI implementation. Through research and expert opinion gathering, the article depicts a complete scenario of AI in ELL at present.

Even if it contributed to literature, several limitations accompany this study. It mainly relies on qualitative methods, which may limit the generalizability of results. The results might have been strengthened more by using a mixed-methods approach that combines both qualitative and quantitative data. Besides, the paper concentrates only on one aspect of English as an alternative language while ignoring the effects of AI for learning another language or a bigger scope of education. Due to the fast pace of AI development, some findings may be outdated, thus explaining the continuous need for research in this field. Besides, this piece of work may not give a complete view of AI situation in different places of the world because there is a difference in access to and use of artificial intelligence technology not only between regions but also between cultures.

In order to tackle these limitations and open up more possibilities for the field, researchers might consider different topics for their next studies. Such longitudinal studies might help us evaluate the prolonged effects of AI instruments on language learning and memorization. Research in the future might be of a quantitative nature, examining how different AI tools directly bring about the improvement of specific language skills. Furthermore, investigators could extend the scope of their study by switching from English to other languages to solve the issue of the use of AI in language teaching. While we know significant relationship between motivation, anxiety and social interaction in language learning, researching the psychological and social effects that such integration may create on learners and educators would have been important results. It could be also useful to analyses economic aspects of AI inclusion in language education, for example cost efficiency analysis or the

impact of AI on future job market for language teachers. Mainly, cross-cultural studies can help to examine how cultural contexts play a role in the use and functional aspects of AI in language learning. Lastly, frameworks for ethical AI use and testing in education [ethical challenges such as data privacy, algorithmic bias or equitable access to AI resources] would enable a more responsible integration of AI in education.

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