

## **An Evaluation of the Impact of Technology and Artificial Intelligence on the Learning of English**

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### **Abstract**

Education is being revolutionized by technology and (AI) in English Language Learning. This study uses the appraisal method to investigate how technology and artificial intelligence affect English language learners at Al Farahidi University College of Education, English Department. The study explores the experiences and perceptions of students using a quantitative methodology and questionnaire. This includes computers, cellphones, tablets, and chatbots with artificial intelligence. The majority of students believe that learning with technology is interesting and enjoyable, which makes it simpler to practice English both inside and outside of the classroom. Artificial intelligence (AI) tools are lauded for enhancing motivation, proficiency, and preference beyond traditional methods. The enjoyment of AI chatbots remains diverse, alongside the advantageous use of technology and artificial intelligence (AI) in English language acquisition. The research also determined the beneficial applications of technology and artificial intelligence (AI) in English language acquisition.

**Keywords:** (artificial intelligence, technology, English language learning) .

## تقييم تأثير التكنولوجيا والذكاء الاصطناعي على تعلم اللغة الإنجليزية

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## الملخص

يحدث التعليم ثورة من خلال التكنولوجيا والذكاء الاصطناعي في تعلم اللغة الإنجليزية. تستعمل هذه الدراسة طريقة التقييم للتحقيق في كيفية تأثير التكنولوجيا والذكاء الاصطناعي على متعلمي اللغة الإنجليزية في كلية التربية بجامعة الفراهيدي، قسم اللغة الإنجليزية. تستكشف الدراسة تجارب وتصورات الطلاب باستعمال منهجية كمية واستبيان. ويشمل ذلك أجهزة الكمبيوتر والهواتف المحمولة والأجهزة اللوحية وروبوتات الدردشة ذات الذكاء الاصطناعي. يعتقد غالبية الطلبة أن التعلم باستعمال التكنولوجيا مثير للاهتمام وممتع، مما يجعل ممارسة اللغة الإنجليزية داخل وخارج الفصل الدراسي أسهل. يتم الثناء على أدوات الذكاء الاصطناعي لرفع الدافع والمهارة والتفضيل فوق الأساليب التقليدية. لا يزال الاستمتاع بروبوتات الدردشة بالذكاء الاصطناعي متنوعاً، فضلاً عن التطبيق المفيد للتكنولوجيا والذكاء الاصطناعي في تعلم اللغة الإنجليزية. كما خلصت الدراسة إلى الاستعمالات الإيجابية للتكنولوجيا والذكاء الاصطناعي في تعلم اللغة الإنجليزية. الكلمات المفتاحية: (الذكاء الاصطناعي، التكنولوجيا، تعلم اللغة الانكليزية ).

## Introduction

Technological advancement is occurring at an accelerated pace, influencing nearly every facet of our lives, including education. Language acquisition, especially the instruction and learning of English as a second language, is a domain where technology has shown significant potential.

The incorporation of artificial intelligence (AI) and various technological tools has become essential in English Language Learning (ELL), offering innovative methods to enhance student engagement and language proficiency. This research employs an online survey and a quantitative approach to investigate the impact of artificial intelligence (AI) and technology on English language acquisition. The significance of learning English in our progressively globalized culture cannot be overstated. Over time, English has evolved into a global lingua franca that facilitates communication among individuals from many backgrounds and locations. Consequently, proficiency in English is widely esteemed and facilitates access to social, professional, and academic opportunities worldwide. Consequently, there exists a substantial demand for effective English language acquisition methodologies.

## Literature Review

John McCarthy is recognized with coining the term "artificial intelligence" in 1956. Artificial Intelligence, or AI, is the field dedicated to the creation of intelligent systems, specifically computer programs that demonstrate cognitive capabilities. Artificial Intelligence (AI) is increasingly integral to our daily lives, significantly impacting different domains, both major and trivial. This technology encompasses several applications, such as sophisticated medical diagnostics employing deep learning methodologies. Artificial intelligence demonstrates exceptional capability

in producing realistic content, including photographs and films, and is essential in implementing security protocols such as facial recognition to safeguard data. Chatbots driven by artificial intelligence are improving customer interactions, while intelligent home systems provide ease and control over domestic activities. Artificial intelligence is employed in the surveillance of environmental conditions, enhancing worker safety, gaming, and environmental exploration. The ongoing advancement of AI is profoundly influencing the future, acting as a vital element in human development and enhancing our lives through increased comfort and efficiency. The results emphasize the substantial positive influence of AI-driven tailored learning on student academic performance, engagement, and motivation, hence underscoring the potential advantages of AI in education. Nonetheless, it underscores the imperative for ethical considerations in the application of AI in education [1]. The commencement or starting point.

## Research Questions

- What impact does the integration of Artificial Intelligence have on English Language Learners?
- How does the integration of technology significantly impact English Language Learners?

## Research Goals

- To gain a thorough understanding of the impact of Artificial Intelligence on individuals learning the English language.

-The objective is to analyze the influence of technology on the process of achieving proficiency in the English language.

## **Theoretical Framework of Appraisal System**

The Appraisal Framework is a specific method for analyzing and understanding how language is employed to assess, express opinions, create a textual identity, and establish interpersonal dynamics. Appraisal Theory is an expansion and enhancement of Halliday's Systemic-Functional Theory. It focuses on the utilization of different resources to express attitudes and manage relationships. Appraisal Theory consists of three sub-types: Attitude, Engagement, and Graduation [8]. The term "attitude" in this article refers to all the different meanings related to attitude inside the Appraisal Framework. According to the Appraisal Framework, Attitude can be broken down into three sub-systems: Affect, Judgement, and Appreciation. Effect refers to the description of things based on emotions, Judgement involves assessing human behavior based on social norms, and Appreciation involves evaluating objects and products based on aesthetic principles and other social values (9). The Appraisal Framework is a methodical methodology that examines, describes, and elucidates how language is employed to assess, take positions, create textual identities, and handle interpersonal positioning and connections. This study examines how individuals evaluate and make judgments about other individuals, their statements, physical things,



events, and situations. It also investigates how these evaluations lead to the formation of alliances with like-minded individuals and the distancing from those who have differing perspectives. The text examines the explicit presentation of attitudes, judgments, and affective responses, as well as their indirect implications, presuppositions, or assumptions. In addition, it examines how the manifestation of these attitudes and judgments is often strategically controlled to consider the constant potential for opposition or disagreement from those with contrasting perspectives. Appraisal Framework can be defined as a comprehensive system that encompasses interpersonal meanings. Speakers and writers utilize the tools of Appraisal to navigate their social interactions, expressing their emotions and attitudes towards various subjects and individuals. The current study used attitudes to evaluate the impact of technology and artificial intelligence on the learning of English.

### **Research Methodology**

This study utilized quantitative research methods to examine the assessment of the influence of AI and technology on (ELL) among students at Al Farahidi University college of Education, English Department. The data for this study was gathered from a sample of 50 students selected from the English Department. The main tool used for collecting data was a structured survey administered through class Forms. The survey comprised a sequence of inquiries formulated to evaluate several facets of AI and technology incorporation in ELL. This

encompassed gauging their regarded influence on language competence, learning achievements, and the overall educational encounter.

### Data Collection:

The data collection method involved distributing the survey form to students in the English department of Al Farahidi University College of Education during class sessions. The participants received information on the research purpose, the voluntary nature of their participation, and the confidentiality of their responses. They were subsequently permitted access to the survey via the supplied document.

The survey gathered data on various factors, including the frequency of technology use in language learning, the perceived effectiveness of AI-driven tools, challenges encountered while using technology in language learning, and students' overall satisfaction with technology-enhanced language learning experiences.

### Results

Table 1: Student Age

		Frequency	Percent
Valid	Male	38	79.6
	Female	12	20.4
	Total	50	100.0

As can be noted the distribution of students categorized by gender and Of the 50 students that participated in the study represent in Table. The majority, accounting for 79.6% of the sample, are male, whilst 20.4% are female. This table offers a succinct and thorough depiction of the gender distribution among the participants.

Table 2: Students age

		Frequency	Percent
Valid	Above 22	34	65.3
	under 22	16	34.7
	Total	50	100.0

The age distribution of the pupils is further broken out in Table 2. Students are divided into two categories: "Above 22" and "Under 22." According to the results, 34.7% of the students are younger than 22 and 65.3% of the students are older than 22. The participants' age demographics can be better understood in depth thanks to this classification.

Table 3: How often do you utilise technology to learn a language, such as computers, cellphones, and tablets?



		Frequency	Percent
Valid	Never	1	2.0
	Occasionally	8	16.3
	Sometimes	8	16.3
	Often	8	16.3
	Always	25	49.0
	Total	50	100.0

Table 3 offers important information about how often Al Farahidi College students use devices like computers, cellphones, and tablets for language learning. The data shows that the 50 participants used technology in a variety of ways. Just 2.0% of students said they have never used technology to learn a language, indicating that the vast majority of students use digital tools in some capacity. It's interesting to note that 16.3% of students fall into the "Occasionally," "Sometimes," and "Often" categories, demonstrating a range of integration levels between their use of technology and language learning practices. The most interesting discovery, though, is that 49.0% of the students said they use technology "Always" to learn languages. This significant proportion highlights the critical role that technology plays in aiding language learning as well as the necessity for educators and institutions to effectively use digital resources to improve language learning opportunities.

Table 4: Is technology–assisted language learning more interesting than conventional approaches in your opinion?

		Frequency	Percent
Valid	yes	44	87.8
	no	6	12.2
	Total	50	100.0

Nearly 87.8% of students in Table 4 believe that technology–enhanced language learning is more interesting than traditional approaches. Their attention and motivation are increased by the dynamic and interactive features of digital technologies, which they value. But 12.2% of students still favour the old–fashioned ways, indicating that some students still think the old–fashioned ways are useful. This highlights the necessity for a well–rounded strategy that incorporates both traditional and technological teaching approaches to accommodate students' diverse learning needs and preferences.

Table 5: Is it now simpler for you to practise your English outside of the classroom thanks to technology?

		Frequency	Percent
Valid	yes	47	93.9
	no	3	6.1
	Total	50	100.0

Nearly 93.9% of students, according to Table 5's statistics, believe that technology has made it simpler to practise English outside of the classroom. This suggests that a growing number of people believe that using digital tools and resources to integrate language learning into everyday circumstances can improve language proficiency. However, a tiny minority of students just 6.1% do not hold this view and believe that technology is less useful in this context. Despite their small number, their comments emphasise how critical it is to resolve any issues or restrictions to guarantee that technology successfully supports all students in their language-learning pursuits.

Table 6: Is studying English more fun with technology?

		Frequency	Percent
Valid	yes	48	95.9
	no	2	4.1
	Total	50	100.0

Table 6 demonstrates that a resounding 95.9% of students believe using technology improves their enjoyment of studying English, suggesting that digital resources have a major positive impact on students' motivation and zeal for language acquisition. Just 4.1% of people do not think this way.

Table 7: How motivated are you to study English now that you have technology?

		Frequency	Percent
Valid	yes	43	85.7
	no	7	14.3
	Total	49	100.0

According to Table 7, 85.7% of students said that using technology has made them more motivated to study English. This substantial majority suggests that students' motivation and excitement for language study are greatly increased by digital resources. However, a lesser percentage 14.3%, did not report feeling more motivated as a result of technology. To guarantee that technology effectively boosts motivation for all students in their English language studies, the concerns of this minority must be acknowledged and addressed.

Table 8: Compared to conventional techniques, would you prefer technology-enhanced learning?

		Frequency	Percent
Valid	yes	42	85.7
	no	8	14.3
	Total	50	100.0

Table 8 indicates that a substantial 85.7% of students would opt for technology-enhanced learning over traditional methods, emphasizing

their preference for the interactive and dynamic nature of digital tools in language education. However, 14.3% of students expressed a preference for traditional.

Table 8 indicates that a substantial majority of students, 85.7%, prefer technology-enhanced learning to traditional methods, underscoring their preference for the dynamic and interactive aspects of digital tools in language acquisition.

14.3% of students, however, stated that they preferred the use of conventional techniques. Comprehending the rationale behind this minority perspective is essential to establishing inclusive learning settings that accommodate a range of needs and preferences. This information emphasises how crucial it is to take a balanced strategy that takes into account students' different learning preferences and styles by incorporating both technology and conventional approaches.

Table 9: In comparison to previously using technology, how do you feel about your level of English language proficiency?

		Frequency	Percent
Valid	improved	40	79.6
	Stayed the same	4	8.2
	Declined	6	12.2
	Total	49	100.0



According to Table 9, a sizable majority of students—79.6%—think that using technology in their language learning process has enhanced their English language ability. This favourable opinion emphasises how digital technologies might improve language proficiency. But a lower proportion, 8.2%, thought their skill level stayed the same, while 12.2% thought it decreased. Comprehending the causes of these discrepancies is crucial to maximising the influence of technology on language learning results, and it emphasises the significance of offering individualised assistance to every student to guarantee ongoing advancement in English competence. Table 10: Have you studied English using chatbots with AI capabilities or language learning software?

		Frequency	Percent
Valid	yes	37	73.5
	no	13	26.5
	Total	50	100.0

Table 10 demonstrates a significant 73.5% of students' use of AI-powered chat bots or language learning software during their English language learning process, suggesting a high inclination to accept cutting-edge AI-driven approaches to language instruction. A minority of 26.5%, nevertheless, have not yet used this technique. Examining the causes of this discrepancy in adoption rates can help optimise the way AI-powered tools are included into language learning so that every

student can take advantage of them. This information highlights the possibility for more developments in the field of language teaching as well as the growing interest in AI technology.

Table 11: How frequently do you use AI for language learning purposes?

		Frequency	Percent
Valid	Never	10	18.4
	occasionally	7	14.3
	Sometimes	12	24.5
	Often	9	18.4
	Always	12	24.5
	Total	50	100.0

The frequency with which students use AI for language acquisition is displayed in Table 11. Data shows a wide pattern of engagement: 18.4% of students said they never used AI for language acquisition, compared to 14.3% who do so rarely, 24.5% who do so infrequently, and 18.4% who do so frequently. Furthermore, 24.5% of students said they always used AI to aid in their language acquisition. This wide variety of answers highlights the need for flexible and adaptive AI systems that accommodate individual preferences and demands by revealing the differences in how students engage with AI in language learning. Furthermore, the fact that a sizable percentage of students actively

incorporate AI into their studies highlights the expanding incorporation of AI technology into language learning techniques.

Table 12: Have you become more motivated to learn English as a result of using AI-powered language learning tools?

		Frequency	Percent
Valid	yes	40	81.6
	no	10	18.4
	Tot al	50	100.0

Table 12 shows that a significant portion of students—81.6%—believe that using AI-powered language learning resources has improved their desire to study the language. This powerful confirmation highlights the important part AI technology plays in increasing students' motivation and excitement for language learning. A smaller portion, 18.4%, did not see a comparable rise in motivation, though. Gaining an understanding of the rationale behind this minority viewpoint will help maximise the effects of AI-powered resources and guarantee that every student is more motivated to study English. This research highlights the benefits of AI for language learning as well as the possibility for more integration and improvement of AI-driven educational systems.

Table 13: In comparison to conventional language learning resources, do you think AI catboats or language learning software to be more motivating?

		Frequency	Percent
Valid	yes	40	79.6
	no	10	20.4
	Total	49	100.0

According to Table 13, a sizable majority of students—79.6%—find that language learning software or AI chatbots are more inspiring than conventional language learning resources. This clear preference shows how AI-powered solutions may motivate and interest pupils in their language learning. A minority of 20.4%, on the other hand, disagreed, saying that conventional materials were not more inspiring than AI catboats or software.

Table 14: Would you suggest language learning apps with AI to others?

		Frequency	Percent
Valid	yes	43	85.7
	no	7	14.3
	Total	49	100.0

Table 14 indicates that 85.7% of students would recommend AI-powered language learning resources to others, reflecting their satisfaction and positive experiences with these innovative tools. A minority of 14.3% would not recommend them. Analyzing the factors contributing to this

recommendation discrepancy may facilitate the development of AI-driven language learning systems tailored to individual student needs and preferences. Most students indicate a willingness to recommend these tools to others seeking to enhance their language skills, underscoring the potential for broader acceptance and utilization of AI technology in language education.

Table 15: Do you find learning English to be more fun now that AI chatbots are being used?

		Frequency	Percent
Valid	Strongly disagree	18	36.7
	Disagree	13	26.5
	Neutral	11	22.4
	Agree	2	2.0
	Strongly Agree	6	12.2
	Total	50	100.0

Table 15 presents students' perspectives on the use of AI chatbots for studying English. It indicates that 26.5% of students merely disagree and 36.7% strongly disagree that AI chatbots render English learning pleasurable. In contrast, 2% of respondents concur, and 12.2% strongly concur that AI chatbots enhance the enjoyment of learning English. In other terms, 22.4% of students are neutral.



Table 16: What impact do you believe AI chatbots have had on your language skills?

		Frequency	Percent
Valid	Enhanced Vocabulary	17	34.7
	Improved grammar	5	8.2
	Better conversational skills	9	18.4
	All the above	19	38.8
	Total	50	100.0

Table 16 illustrates students' perceptions regarding the impact of AI chatbots on their language proficiency. About 34.7% of students assert that AI chatbots have enhanced their vocabulary, whereas 8.2% believe their grammar has improved. Additionally, 18.4% of respondents assert that AI chatbots have enhanced their conversational abilities. A significant proportion of respondents—38.8%—believe that artificial intelligence-powered chatbots have contributed to the enhancement of vocabulary, grammar, and conversational skills. Thus, AI chatbots are widely viewed by students as beneficial for a variety of language competence characteristics.

## Discussion

When we take a broader look at technology—which include computers, cellphones, tablets, and artificial intelligence—we can see that it has

become a crucial component of how English is taught to pupils. For language study, they employ these digital tools often; in fact, some of them use technology "always." Most students believe that using technology to assist language learning makes it more interesting and pleasurable than using conventional techniques. Furthermore, they may now practise their English outside of the classroom more easily thanks to technology. This illustrates the increasing significance of technology in creating interesting and dynamic language learning environments. A significant proportion of pupils utilized artificial intelligence (AI), encompassing chatbots and language learning applications, for their language studies. The majority of these students indicated that artificial intelligence (AI) had heightened their motivation to learn English, with some expressing a preference for AI-driven resources over traditional ones.

Moreover, many students believe that utilizing AI technology has enhanced their fluency in English. This indicates that students' experiences in language acquisition are positively and motivationally influenced by AI.

Technology and artificial intelligence (AI) are significant elements that enhance English language acquisition at Al Farahidi University College of Education. Although technology has generally enhanced the enjoyment and accessibility of learning beyond the classroom, artificial intelligence

(AI) has specifically demonstrated potential in augmenting motivation and proficiency. These findings suggest that incorporating technology, particularly AI-driven technologies, into language education can offer students effective and stimulating learning experiences. Institutions should focus on enhancing AI integration, personalizing learning experiences to address individual needs, and considering diverse student preferences to maximize the utilization of AI and technology in ELL. To provide inclusive, efficient, and comprehensive language training, instructors must adapt their methodologies as technology evolves rapidly.

## Conclusion

This research employed appraisal theory (attitude) to illuminate the increasingly significant role of technology, particularly AI, in English language acquisition among students at Al Farahidi University College of Education, English Department. The results underscore the beneficial influence of AI-driven tools on motivation, competence, and overall satisfaction in language acquisition. Moreover, technology, encompassing computers and cellphones, has emerged as a vital and stimulating tool for students' language acquisition. The varied perspectives of AI chatbots' delight highlight the necessity for tailored and sophisticated AI solutions to address individual preferences. Several recommendations can be derived from the primary findings. Institutions must investigate the deeper integration of AI-driven language learning technologies, acknowledging its capacity to enhance motivation and performance. Moreover,

instructors must implement a balanced strategy that integrates technology with conventional approaches to accommodate varied student preferences.

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