

## Digital Competencies and Artificial Intelligence in Teaching and Learning English as a Foreign Language

Instructor: Dr. Efad Abdul Jabbar Ghadban

Iraqi Ministry of Education, Al Karkh First Directorate  
Mixed Fine Arts Institute. Baghdad - Morning Studies

[efadabduljabbar22@gmail.com](mailto:efadabduljabbar22@gmail.com)

0790 383 5 330

0774 707 9172

### Abstract

Lifelong learning is crucial since knowledge is changing at such speeds that skills must be continuously mastered and reinforced. The challenge of artificial intelligence worries administrators because they think it will soon go from being a useful tool for human society to eventually taking over humanity. In education, artificial intelligence has altered the outmoded teacher - learner collaboration into one between a teacher or learner and artificial intelligence. This changeover necessitates a reconsidering of teachers' duties and the skills they request in the artificial intelligence era. However, few countries have well defined these competences or built nationwide programs to train teachers in artificial intelligence, leaving numerous educators lacking adequate supervision. Research indicates that artificial intelligence can provide benefits for teaching and learning English. Investigating the outcomes of AI's incorporation into education and the consequences it may have for institutions' futures is the aim of this study. It is an attempt to answer these questions: How is artificial intelligence being used for English language teaching and learning? What are the opportunities, issues, and challenges? The findings indicate that the integration of AI in education will provide new products, advantages, and disadvantages for educators and educational institutions.

**Keywords:** Digital, Competencies, Artificial, Intelligence.

### 1. Introduction

Education is one of the many industries that artificial intelligence is revolutionizing. AI has the prospective to revolutionize teaching (Holmes et al., 2019). The integration of intelligent machines intended to mimic and duplicate human intelligence in educational settings is known as artificial intelligence (AI). Artificial intelligence inspires so much controversy in both academic and popular circles. AI can improve education by tailoring it to students' needs and interests, providing variable learning routes and rapid feedback, since it is a set of technologies which allows computers to achieve

a wide variety of unconventional actions, such as seeing, accepting, and interpreting spoken and written language, examining data, making propositions, and so on. According to the current study, artificial intelligence (AI) is the use of artificially intelligent technologies in English teaching to enhance the approaches to selecting and arranging academic content.

In light of this, the goal of this research is to investigate the potential outcomes of the.

incorporation of AI into academia and the implications it may have for the future of educational organizations

Teaching English is a crucial educational goal for enhancing students' capacity for worldwide interaction. Numerous academics recognized the value of employing artificial intelligence applications to produce written texts, and enable learners to improve their ability to constitute sentences and texts, and practice their writing and reading skills. Karsenti (2019) emphasized that emerging technology will fill in our lives and interest our youth, and this case may leave schools with no option but to make opportunity for them.

## 2. Definitions of Artificial Intelligence

The process of integrating and applying technology that utilizes AI in the classroom in order to enhance teaching and learning is recognized as AI in education. Artificial intelligence has had a deep impact on instruction and teaching practice. It is altering the teaching approaches of teachers and the learning techniques of students (Xue and Wang, 2022). Contemporary dictionary definitions emphasize artificial intelligence (AI) as a field of computer science and the potential of machines to mimic human intelligence. Oxford Dictionary describes AI as “The theory and advance of computer schemes able to achieve tasks habitually necessitating human intelligence, such as visual insight, speech recognition, decision-making, and conversion between languages”. This table sheds the light on some important definitions of artificial intelligence:

**Table 1 Artificial Intelligence Definitions**

|                      |  |
|----------------------|--|
| Bellman, 1978        | Automation of actions that is related with human intelligent, such as decision-making, problem solving, learning . . .                       |
| Haugeland, 1985      | The motivating new mental activity to make computers reason.   |
| Kurzweil, 1990       | The talent of generating machines that do actions that need intellect when done by persons.  |
| Winston, 1992        | The act of the computations that make it probable to see, think, and do actions.   |
| Nilsson, 1998        | The part of computer skill associated with intellectual actions and includes insight, thinking, learning, interacting in complex situations. |
| Russell et al., 2023 | A computer that mimic human intellect, containing algorithms that use machine data able of learning and imitating complex human actions.     |

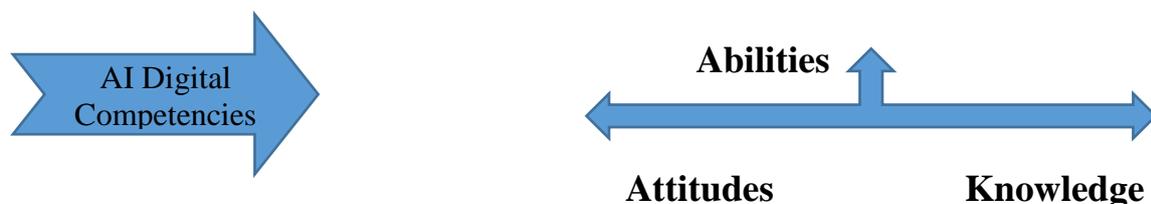
### 3. Digital Competencies and Language Teaching

Digital competencies include the abilities, knowledge, and orientations required for utilizing AI-related technology in a variety of settings in an ethical and efficient manner. Education in the digital phase demands the attendance of instructors who are extremely proficient in digital abilities (Mitra, 2014). AI is profoundly altering language teaching, and in order to prosper in this changing environment, instructors and students must acquire digital competencies. To enable efficient human-machine collaboration during the teaching learning process, it is essential to acquire AI skill sets.

To survive and become competent in digital skills, language instructors need to continually acquire new ones. Therefore, performance criteria must be defined to identify the degree of competency required in order to build and measure competency. For instance, people in general may require proficiency for communicating at a elementary stages, which entails the capacity to converse reasonably on a wide range of subjects. A framework of competencies designed to explain the ways in which digital technologies could be utilized to improve and restructure education is needed. Being an innovative concept, it sparks questions and debates about how it will affect language curriculum, instruction, and assessment in the digital age, what instruments and techniques schools will use to advance its goals, and what competencies pre-service and in-service language teachers will require to implement it in their own educational environments.

Educators have ventured into unidentified region that poses significant concerns about how AI will affect educational institutions in the future. Digital competencies in English language teaching are described as a confluence of attitudes, abilities, and knowledge. See figure 1

**Figure 1 AI Digital Competences**



The idea of AI literacy becomes a fundamental component of modern education. Basically, it is about having the knowledge, abilities, and attitudes to work with AI technology. AI mastery refers to the capacity to grasp, practice, display, and critically produce activities using AI applications without necessarily being able to improve AI applications themselves (Long and Magerko, 2020). It includes both technological expertise and an understanding of artificial intelligence. Beyond conventional learning paradigms, AI literacy in the classroom nowadays gives students the tools they need to use AI effectively in a variety of spheres of life and professional settings. Sauro and Zourou (2019) have pointed out that developments in machinery that permit users to make normal connections produce possibilities that recreate prototypes of creation, circulation, and recycling of information” (p. 1). The implementation of AI is not itself the solution to face the learning challenges in instruction and its use necessitate a correct pedagogical design (O’Dea and O’Dea, 2023).

The UNESCO praises educational organizations improve AI understanding across all ranks of society (UNESCO, 2023). Their AI Competency Framework for Students aims to help outlining twelve competencies across four dimensions: A human-centered mindset, Ethics of AI, AI techniques and applications and AI system design. Needless to say that

AI techniques and applications are associated with educational institutions and their outcomes. In order to successfully incorporate technology into language instruction, language teachers must possess a variety of digital competencies, such as the ability to source, create, and share digital resources, use digital tools for communication, collaboration, and professional development, and be skilled in using technology for instruction, assessment, and learner empowerment. Redecker (2017) highlights the consequences of teachers obtaining digital proficiency. Ferrari (2012) placed

an emphasis on the need of classifying the proficiency levels according to age of learners, depth of related material, and level of cognitive difficulty.

#### 4. Artificial Intelligence Techniques and Applications

The development of computers that can comprehend and produce human language is one of artificial intelligence's long-standing objectives. Artificial intelligence has become a vital component of contemporary society, transforming various fields such as education and research (Zawacki et al., 2019). Creating artificial intelligent systems necessitates precise planning and execution across multiple important stages. The AI development lifecycle includes the entire process of generating, deploying, and sustaining AI models. Each phase is crucial for addressing specific difficulties and ensuring that the AI model achieves the required results. Like all sciences, artificial intelligence is a human accomplishment concentrating on a particular set of challenges and creates specific methods for resolving these challenges.

After 1995 the notion of AI in education changed as the fusion of AI into the educational systems which enables teaching, learning, and decision-making, as well as providing virtual assistance for modified instruction (Dignum, 2021).

Chen et al., (2020) state that the use of AI in education has incorporated an assortment of tasks like: Student and school assessments, exam grading and evaluation, individualized instruction, smart schools, and online and remote learning. Language applications have been applied for both generating tasks like translation, summarization, and question answering, as well as non-generative activities like entity extraction and categorization. Predictive analytics, natural language processing, and autonomous systems are all applications of AI. It is used to produce knowledge, which is then employed in content creation and design, as well as scientific research to develop new hypotheses and models.

Intelligent machines are used by adaptive learning systems to generate personalized learning routes for every student. These systems can adjust the pace and substance of instruction to maximize learning outcomes by evaluating a student's performance, learning preferences, and learning style. This degree of customization meets the various demands of students, enabling them to overcome obstacles and realize their greatest potential. As educators continue to develop AI systems that can mimic human behavior, we are not only improving technology but also advancing our understanding of what it means to be human. AI is not about substituting humans, but about

working alongside humanity amplifying how we think, expanding our capabilities, and helping better understand ourselves.

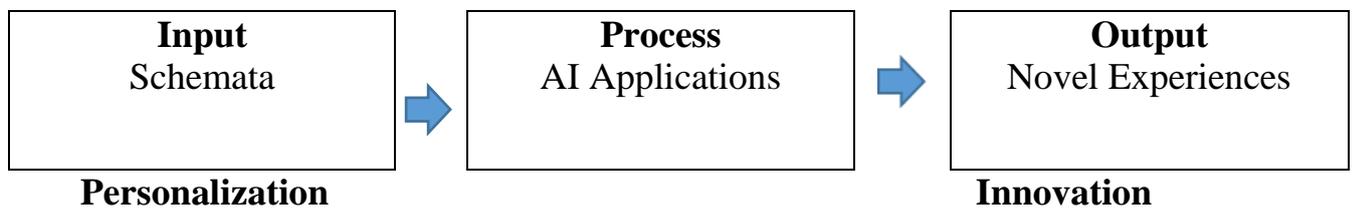
### 5. The Role of Artificial Intelligence in Learning

Almost every facet of academic achievement is impacted by technology. Growing technical developments have opened up new opportunities for the field of education. There is a lot of prospective for innovation and expansion in the field of educational technologies in English language teaching (ELT). Language instructors need to be up to date with the new technical developments in order to assure that their learners have the capabilities and information needed for achievement in a planet that is changing quickly.

Digital proficiencies have completely changed the way people study and learn and to meet the increasing demand in education, these technologies are still in their development and will requisite important modification.

According to learning theories, schemata, which are mental models that arrange and interpret data, serving as knowledge building blocks that aid teacher-student in comprehending and interacting with the outside world. Studies about the theory of general artificial intelligence can be ascertained to at least the 14th century, and these studies advanced through the work of Alan Turing in 1937 (Humble & Mozelius, 2019). They stand for mental and behavioral patterns that help us classify data, forecast outcomes, and make sense of novel educational experiences by connecting them to our prior knowledge. The use of AI applications could link between our input and output to reach novel experiences through the use of AI applications, which is considered the core of this study. See figure 2.

**Figure 2 AI and Learning**



A cognitive framework known as schema theory describes how people arrange and combine incoming information with previously learned material that is kept in long-term memory. This theory holds that learning happens when students make meaning of unfamiliar texts or scenarios by activating pertinent schemata, which are mental structures that reflect related concepts and experiences and in this case through the use of AI.

## 6. Machine Learning and Artificial Intelligence

In order to enhance teaching and learning, cognitive-centered approaches to AI concentrates on how technology's evolving capabilities may enhance and complement the intelligence of humans. Artificial Intelligence and machine learning technologies seem to be advanced spectacles that alter the path of education considerably from traditional learning to a technical learning method (Ahmad et al., 2021)

The procedure of training a machine to learn from its inputs deprived of obvious programming is known as machine learning, and it is part of artificial intelligence. The subfields of artificial intelligence include neural networks, deep learning, and machine learning.

## 7. Difficulties in Incorporating Artificial Intelligence into the Classroom.

Though there is ongoing debate about both the advantages and disadvantages of utilizing AI machinery in instruction, including the worries about personalization and moral concerns, there is a rising agreement that the unusual range of current and future advantages will win out.

Pedagogy and technology are interwoven; teaching defines the action, while technology sets the pace and produces the accompaniment. For example students as well as instructors can use ChatGPT. For example, an instructor can use it to generate content together with course plans, performances. The incorporation of AI supported learning solutions are important to the revolution of education as they have the ability to produce inspiring and quality learning settings (Zhang et al., 2023).

Paradoxically, traditional human abilities become more appreciated as technology advances. These abilities are required for both evolving and creative solutions to challenging concerns and for using and examining information and technology efficiently. Students receive access to an innovative, customized learning environment that promotes efficiency, flexibility in the classroom, individual learning experiences, and interaction.

Although AI systems are innovative, they cannot replace human educators' understanding, comprehension, and collaborating with others. Students' intelligent and passionate growth, as well as their general enthusiasm and participation in the learning procedure, may be influenced by this absence of human elements. Concerns with AI in education include:

- privacy and security issues,
- bias in algorithms that can affect educational outcomes,
- the potential for over-reliance on technology at the expense of teacher-student interactions,

- training and teacher opposition,
- lack of creativity and emotion.

### **8. Artificial Intelligence and Teaching English**

AI in education encompasses many domains like content design, product, assessment, feedback, and critical thinking. Learning English is experiencing a thoughtful alteration with the arrival of digital machinery and artificial intelligence (Wang et al., 2022).

#### **8. 1. Content Design with Artificial Intelligence**

Artificial intelligence (AI) algorithms can quickly and accurately analyze large amounts of data, making it simpler to decide on the most beneficial and pertinent content for a specific audience this might include presentations, worksheets, interactive courses, tests, quizzes, pictures, movies, and audio, that can be produced and edited by AI. It is being seen more and more as an effective instrument for developing instructional techniques and improve the language abilities of learners.

The potential of AI in assessing large datasets is one of its primary accomplishments, giving teachers important new information on the performance and learning preferences of individuals. Designing curricula and producing educational content has been revolutionized by the incorporation of artificial intelligence.

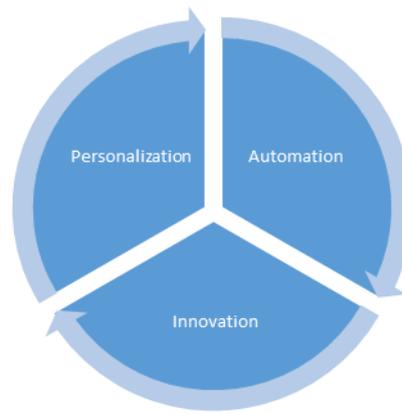
Technology bounces scholars' innumerable probabilities for self-directed learning through social networking sites, mobile devices, educational software, and rich internet means. AI allows the expansion of educational content that is based on natural language processing skills thus confirming material that is reliable, brief, and grammatically accurate (Dawes, 2023). AI can improve access to learning materials for students from any region or economic background. Educators can create focused interventions that address certain learning gaps by using machine-learning algorithms to understand students' strengths and shortcomings. The use of AI in curriculum design is emerging as a solution that not only improves educational quality but also gives teachers the ability to design more effective and engaging learning experiences for students as educational institutions around the world struggle with the complexity of individualized learning needs.

#### **8. 2. Educational Product with Artificial Intelligence:**

AI can swiftly ascertain what your end users might want based on their past behavior because it can evaluate vast amounts of data at breakneck speed. For product designers, this opens up a world of possibilities to produce exceptional products along with user experiences. AI-based instruction

product is more learner-centric compared to the outdated technique of educational product and is useful for learners as well as teachers. Teachers can incorporate AI programs as complementary resources to support students and afford hands-on experiences in the form of human interaction. The way digital products are made, used, and experienced is already being significantly impacted by AI in product design. Three factors are influencing product design: personalization, automation, and innovation. (Figure 3)

**Figure 3 Factors Influencing Product Design**



- ❖ **Personalization:** Personalized learning can be referred as one of the most significant features of AI tools, which really affects the quality of the learning process (Wang, 2019).
- ❖ **Customized:** Products and experiences that are tailored to each user's interests and behaviors are becoming possible through the application of AI in product design.
- ❖ **Automation:** Data access, image processing, and quality monitoring are just a few of the time-consuming and frequently performed tasks that AI for product design is automating. AI improves the process of creating courses by automating processes like translation and content generation.
- ❖ **Innovation:** AI in product development is making it possible to develop completely new features and products. AI is broadening the spectrum of product design possibilities, resulting in more inventive and perceptive products. AI's capability to evaluate large datasets and foresees emerging inclinations supports students stay ahead of difficulties, bring into line their learning intentions with evolving requirements (T. Luo. et al 2024).

### **8. 3. Educational Assessment with Artificial Intelligence:**

Assessment plays essential part in the educational preparation procedure, posing essential visions into the efficiency of language education by

recognizing inspiring areas and evaluating learner progress in language paths (Pearson and Murphy, 2020). The scientific research that is currently available on AI in language assessment frequently emphasizes how the technology can improve both the quality and efficacy of test development.

AI has the potential to customize test questions dependent on student performance information, resulting in individualized evaluations that improve learning results. Providing assurance of student learning is one of assessment's main goals. The submitted work must accurately reflect each student's involvement as a prerequisite for this evidence to be used. AI is being utilized increasingly in educational assessment to automate grading, personalize learning, and give more effective and efficient feedback. AI-powered solutions are able to evaluate student answers, pinpoint problematic areas, and personalize educational materials to meet the needs of every learner. More individualized, interesting, and successful learning experiences may result from this. AI is substituting human rating progressively and can mark approximately all types of tests. Although, programs associated with essay evaluations and testing is still in its initial stages.

#### **8. 4. Educational Feedback with Artificial Intelligence:**

Feedback that is appropriate, applicable, and unbiased is very imperative. AI has the ability to deliver such important standards. Furthermore, some institutions are providing systems that use AI to follow and monitor students' progress and to notify them if there is any problem with once performance, for instance.

AI creates massive databases of language support to produce contextually related content, permitting scholars to participate in writing as a more constructive process (Maphoto et al., 2024). Giving learners timely, constructive feedback on their written work is a difficult endeavor since teachers have to choose the best source of feedback while also taking into consideration the writing process and content. Instructors may alleviate their workload through incorporating AI-generated feedback into the classroom, allowing them up to dedicate themselves on supporting tailored education and higher-order critical thinking.

Shabakah (2012) clarifies that the leading intentions of AI relate to acting out explicit human procedures and activities such as learning, thinking, and processing natural language through the technology of knowledge exemplification. To take full advantage of the positive influence of AI-generated responses, educators need to provide learners' critical commitment with it (Teng, 2025). Spoken dialogue systems for example, with conversational agents provide possibilities for practicing speaking the target

language while providing personalized feedback in a relaxed setting by means of conversational artificial intelligence. Educational research indicates that generated feedback using AI improved numerous aspects of writing, like vocabulary, grammar, and spelling (Hwang et al., 2024).

### **9. Promoting Critical Thinking with Artificial Intelligence:**

A significant competency for scholars' accomplishment is critical thinking, which necessitates evaluating the legitimacy of material, inferring it, and illustrating deductions from it. Becoming skilled at critical thinking requires a deep understanding of the qualities of what we are evaluating and the criteria appropriate to the evaluation of those qualities (Paul, 1993).

English language places supplementary burden on EFL students to achieve linguistic ability and improve academic skills like critical thinking (Liu et al., 2023). Artificial intelligence can greatly enhance critical thinking by giving individualized learning experiences, enabling group problem-solving, providing real-time feedback, and stimulating in-depth information analysis. AI tools can assist students in recognizing their areas of weakness, improving learning methods, and critically evaluating the material. AI can also be used to generate ideas, support a variety of learning activities, and build virtual learning environments.

It is imperative to foster a critical thinking language that achieves a balance between prudence and curiosity in the process of introducing AI. Although artificial intelligence can be a useful tool for cultivating critical thinking abilities, there are a number of boundaries that must be cautiously considered. Substantial independence on AI could weaken one's own critical thinking skills (Marzuki et al. 2023). Examining the teaching strategies that can successfully combine AI applications with critical thinking abilities may yield insightful information. In the end, even if AI could appear to offer rapid improvements, critical thinking cannot be replaced by it. Students who approach AI materials critically are better equipped to identify the harmful effects and form inquiry-based habits that will keep them from implementing AI's propositions without seeking advice from an expert.

### **Conclusions**

The field of educational technologies in English language teaching (ELT) has numerous possibilities for innovation and growth. In order to guarantee that students have the skills and knowledge required to achieve success in a rapidly changing world, language teachers must remain up with the latest technology advancements and AI applications.

The future of education depends on fostering and advancing the digital skills of the younger generation. A well-thought-out plan of action consists of

encouraging AI literacy, which in turn refers to the knowledge, abilities, and attitudes that allow people to critically analyze, use, and assess AI systems and technologies in order to safely and ethically participate in an increasingly digital environment. The development of an adaptable, editable curriculum depends on the proliferation of artificial intelligence technologies in the classroom.

To maintain a well-rounded and thorough educational experience and because of the ethical concerns raised by increasing reliance on AI, particularly with regard to bias, transparency, and a decline in human interaction in educational settings, educators must conduct comprehensive assessments of AI systems.

These insights can motivate educators and other stakeholders seeking to incorporate AI into language instruction, as well as developers creating systems for these ages. By streamlining duties like reporting and grading, AI in education will increase teacher effectiveness. It will also make high-quality education more accessible to students coming from all backgrounds by reductions in expenses while retaining student feedback, and it will use natural language processing and vision AI to help students of all abilities succeed.

Concentration on a human-centered approaches that leverage AI as a useful presence to improve, teamwork, engagement among students, cultural diversity, and empathy instead of isolating students, limiting their independence, fostering inequality, and eliminating the significance of teachers is considered vital.

### References

- Ahmad, S.F., Rahmat, M.K., Mubarik M.S., Alam , M.M., Hyder, S.I., (2021) . Artificial intelligence and its role in education Sustainability, 13 (22), pp. 1-11, 10.3390/su132212902
- Bellman, R. E. An Introduction to Artificial Intelligence: Can Computers Think”, 1978. Boyd & Fraser Publishing Company
- Dawes, S. (2023). How AI can deliver personalised learning and transform academic assessment. Available from <https://www.unisa.edu.au/connect/enterprise-magazine/articles/2023/how-ai-can-deliver-personalised-learning-and-transform-academic-assessment/>
- Dignum, V. (2021). The role and challenges of education for responsible AI. London Review of Education, 19(1), 1-11. <https://doi.org/10.14324/LRE.19.1.01>
- Ferrari, A. (2012). Digital competence in practice: An analysis of frameworks.

- Luxembourg: Publications Office of the European Union.
- Haugeland, J. (Ed.). (1985). Artificial Intelligence: The Very Idea. MIT Press.
- Holmes, W., Bialik, M., & Fadel, C. (2019). Artificial intelligence in education: Promises and implications for teaching and learning. Center for Curriculum Redesign. ISBN-13: 978-1-794-29370-0.
- Humble, N., & Mozelius, P. (2019). Artificial Intelligence in Education-a Promise, a Threat or a Hype? In European Conference on the Impact of Artificial Intelligence and Robotics 2019 (ECIAIR 2019), Oxford, UK (pp. 149–156). Academic Conferences and Publishing International Limited.
- Karsenti, T. (2019). Artificial intelligence in education: the urgent need to prepare teachers for tomorrow's schools. *Formation et profession*, 27(1), pp. 112–116. Doi:10.18162/fp.2019.a166.
- Kurzweil, R. (1990). *The Age of Intelligent Machines*. MIT Press.
- Liu, C. C., Liu, S. J., Hwang, G. J., Tu, Y. F., Wang, Y., & Wang, N. (2023). Engaging EFL students' critical thinking tendency and in-depth reflection in technology-based writing contexts: A peer assessment-incorporated automatic evaluation approach. *Education and Information Technologies*, 28(10), 13027–13052. <https://doi.org/10.1007/s10639-023-11697-6>
- Long, D., and Magerko, B. (2020, April). What is AI literacy? Competencies and design considerations. In *Proceedings of the 2020 CHI conference on human factors in computing systems* (pp. 1-16).
- Nilsson, N. J. (1998). *Artificial Intelligence: A New Synthesis*. Morgan Kaufmann
- Maphoto, K., Sevnarayan, K., Mohale, N., Suliman, Z., Ntsopi, T., & Mokoena, D. (2024). Advancing students' academic excellence in distance education: Exploring the potential of generative AI integration to improve academic writing skills. *Open Praxis*, 16(2), 142– 159. <https://doi.org/10.55982/openpraxis.16.2.649>
- Marzuki, W., Rusdin, U., Darwin, D., & Indrawati, I. (2023). The impact of AI writing tools on the content and organization of students' writing: EFL teachers' perspective. *Cogent Education*, 10(2), 1–17. <https://doi.org/10.1080/2331186X.2023.2236469>
- Mitra, S. (2014). The future of schooling: Children and learning at the edge of chaos. *Prospects*, 44(4), 547–558. <https://doi.org/10.1007/s1125-014-9327-9>.

- O’dea, X., and O’Dea, M. (2023). Is artificial intelligence really the next big thing in learning and teaching in higher education? A conceptual paper. *J. Univ. Teach. Learn. Pract.* 20, 1–27. doi: 10.53761/1.20.5.05
- O. Zawacki-Richter, V.I. Marín, M. Bond, F. Gouverneur. Systematic review of research on artificial intelligence applications in higher education – where are the educators? *Int J Educ Technol High Educ*, 16 (1) (2019), pp. 1-27, 10.1186/S41239-019-0171-0
- Paul, R. (1993). *Critical thinking: What every student needs to survive in a rapidly changing world.* Dillon Beach: CA: Foundation for Critical Thinking.
- Pearson, R.V. and Murphy-Judy, K. (2020), *Teaching Language Online: A Guide for Designing, Developing, and Delivering Online, Blended, and Flipped Language Courses*, Routledge, New York.
- Redecker, C., & Punie, Y. (Eds.). (2017). *European framework for the digital competence of educators: DigCompEdu.* Luxembourg: Publications Office of the European Union.
- Russell, R. G., Novak, L. L., Patel, M., Garvey, K. V., Craig, K. J. T., Jackson, G. P., Miller, B. M. (2023). Competencies for the Use of Artificial Intelligence-Based Tools by Health Care Professionals. *Academic Medicine*, 98(3), 348-356. <https://doi.org/10.1097/ACM.0000000000004963>
- Sauro, S., & Zourou, K. (2019). What are the digital wilds? *Language Learning & Technology*, 23(1), 1-7. <https://doi.org/10125/44666>
- Shabakah, N. S. E. (2012). Artificial intelligence and the logic of representing knowledge: The logic of multiple-component material. *Association of Faculties of Computers and Information*, 1(2), 19–33.
- T. Luo, P. Muljana, X. Ren, D. Young, (2024), “Exploring Instructional Designers' Utilization and Perspectives on Generative AI Tools: 288 A Mixed Methods Study,” *Educational Technology Research and Development*, <https://doi.org/10.1007/s11423-024-10437-y>.
- Teng, M. F. (2025). Metacognitive awareness and EFL learners’ perceptions and experiences in utilising ChatGPT for writing feedback. *European Journal of Education*, 60(e12811), 1– 17. <https://doi.org/10.1111/ejed.12811>
- Winston, P. H. (1992). *Artificial Intelligence (Third edition).* Addison-Wesley.
- UNESCO. (2023). *AI Competency frameworks for students and teachers.* Retrieved from <https://www.unesco.org/en/digital-education/ai-future-learning/competency-frameworks>
- Wang, P. (2019). On Defining Artificial Intelligence. *Journal of Artificial General Intelligence*, 10(2), 1–37. <https://doi.org/10.2478/jagi-2019-0002>

- Wang, X., Pang, H., Wallace, M. P., Wang, Q., & Chen, W. (2022). Learners' perceived AI presences in AI-supported language learning: A study of AI as a humanized agent from community of inquiry. *Computer Assisted Language Learning*, 37(4), 1–27.
- Xue, Y., and Y. Wang. (2022). "Artificial Intelligence for Education and Teaching," *Wireless Communications and Mobile Computing*, vol. 2022, Article ID 4750018, 10.
- Zhang, X., Sun, J., and Deng, Y. (2023). Design and application of intelligent classroom for English language and literature based on artificial intelligence technology. *Appl. Artif. Intell.* 37. doi: 10.1080/08839514.2023.2216051

### الكفاءات الرقمية والذكاء الاصطناعي في تعليم وتعلم اللغة الإنكليزية لغة أجنبية

#### مستخلص البحث:

يُعدّ التعلّم مدى الحياة أمراً بالغ الأهمية، إذ تتغير المعرفة بسرعة هائلة، مما يستدعي إتقان المهارات وتعزيزها باستمرار. إن التحدي الذي يفرضه الذكاء الاصطناعي يقلق المسؤولين لأنهم يعتقدون أنه سيتحول قريباً من كونه أداة مفيدة للمجتمع البشري إلى السيطرة على البشرية في نهاية المطاف. ففي مجال التعليم، حوّل الذكاء الاصطناعي التفاعل التقليدي بين المعلم والطالب إلى تفاعل بين المعلم أو الطالب والذكاء الاصطناعي. ويتطلب هذا التحول إعادة النظر في واجبات المعلمين والمهارات التي يحتاجونها في عصر الذكاء الاصطناعي، ومع ذلك، فقد عرفت بعض الدول هذه الكفاءات أو وضعت برامج وطنية لتدريب المعلمين على الذكاء الاصطناعي، مما ترك العديد من المعلمين دون إشراف كافٍ. تشير الأبحاث إلى أن الذكاء الاصطناعي يمكن أن يسهم في تعليم وتعلم اللغة الإنجليزية. وتهدف هذه الدراسة إلى معرفة نتائج دمج الذكاء الاصطناعي في التعليم وتداعياته المحتملة على مستقبل المؤسسات التعليمية، فهي محاولة للإجابة على هذه الأسئلة: كيف يُستخدم الذكاء الاصطناعي في تعليم وتعلم اللغة الإنجليزية؟ ما هي الفرص والقضايا والتحديات؟ كما أشارت إلى أن دمج الذكاء الاصطناعي في التعليم سيوفر منتجات ومزايا وعيوباً جديدة للمعلمين والمؤسسات التعليمية.

الكلمات المفتاحية: الكفاءات، الرقمية، الذكاء، الاصطناعي.