

The Impact of Using Artificial Intelligence Technologies on Enhancing Academic Achievement among Students of Arabic in Higher Education

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Received: 08.02.2026 Accepted: 20.7.2026 Publishing: 10.08.2026

Abstract: This paper examines the concepts of linguistic intelligence and artificial intelligence, highlighting the roles they can play in developing human capabilities and enhancing the quality of university education, particularly in the field of Arabic. It presents a range of definitions showing that artificial intelligence is fundamentally based on the simulation of human behaviour through technologies such as machine learning, data analysis, and the identification of underlying patterns in data. The paper also emphasises the importance of higher education as a fundamental pillar in serving society, fostering a culture of scientific research, and developing students' linguistic and intellectual skills. In this context, it considers the potential of artificial intelligence to improve the educational process by supporting lesson preparation and providing personalised instruction that accounts for individual differences among students and is adapted to their varying abilities and levels. The paper also addresses the advantages and disadvantages associated with the use of artificial intelligence in university teaching. Although artificial intelligence can improve learning approaches and broaden the scope of knowledge, it may also create challenges related to excessive reliance on such technologies and the potential weakening of human interaction within the educational environment. The paper concludes that artificial intelligence constitutes an important qualitative contribution to the educational process without serving as a complete substitute for the central role of human beings in education.

Keywords: artificial intelligence; machine learning; linguistic skills development; students of Arabic; university teaching; advantages and disadvantages of artificial intelligence.

Introduction

Recent decades have witnessed a marked acceleration in the development of artificial intelligence technologies, which have become one of the defining features of the digital age. Their use now extends across various spheres of life, foremost among them higher education, a vital field concerned with individuals' cognitive and intellectual development and with fostering their scientific and creative capacities. As these advanced technologies have emerged, increasing attention has been directed towards examining their potential to improve the quality of education, develop teaching methods, and provide modern analytical and interactive tools that support both lecturers and students in the educational process.

Arabic language education is among the fields that can benefit substantially from artificial intelligence applications, given the structural richness of the language and the complexity of its phonological, morphological, syntactic, and semantic levels. The use of intelligent technologies therefore represents a promising opportunity to improve the quality of Arabic language education and facilitate university students' acquisition of its skills. At the same time, this contemporary

trend raises fundamental questions concerning the limits of technology's role in the educational process and its capacity to emulate the depth of human expertise possessed by lecturers in both linguistic and pedagogical domains. Against this backdrop of optimism about the prospects these technologies offer for the Arabic language, alongside concern about their potential effects on human interaction in the classroom, there is a need for an objective scientific study of the use of artificial intelligence in university education, its genuine potential, and its possible challenges. Hence, this study addresses the following questions: To what extent can artificial intelligence technologies contribute to improving Arabic language education and developing Arabic language skills among university students? How can these technologies contribute to improving university learning outcomes? Can they serve as a substitute for the pedagogical and human roles performed by the lecturer in the classroom? What are the principal challenges and risks that may accompany the adoption of artificial intelligence in Arabic language education within higher education institutions?

First: Definition of Artificial Intelligence

1. Definition of Intelligence

a. Intelligence in Linguistic Usage

Linguists and lexicographers state concerning the linguistic meaning of intelligence: the verb is: “dhakiya, yadhkā, dhakā'an; it is also said: dhakā, yadhkū, dhakā'an. One says: adh kaytu al-ḥarba when I kindled the war.”¹ Dhakā: “al-dhakiyy is used when one says: an intelligent heart and an intelligent boy, when he is quick-witted.”² “Al-dhakwah and al-dhakā, the latter shortened, denote a glowing ember; the plural is al-dhakhw, and the term is derived from the blazing and burning of fire.”³ Al-dhakwah also means a burning piece of fire.

It is said: “So-and-so has attained his full maturity,” when his age has become complete. . . . Al-Hudhali said:

“And a day confronted her whose scorching heat was as though
the fire were blazing in the vast expanse of the broad valley.”⁴

b. Intelligence in Terminological Usage

Definitions of intelligence have differed among scholars in both earlier and modern periods. Scholars of Qur'anic exegesis define it as follows: “Intelligence is acuity and perfection of intuition and its attainment of the highest degree. This is because intelligence signifies decisiveness in matters and swiftness in reaching the truth. Its origin derives from expressions referring to the blazing of fire and the blowing of wind, and from the expression ‘a properly slaughtered sheep’, meaning one whose slaughter has been effected by the sharpness of the knife.”⁵ Abd Allah Khidr Hamad defines it as follows: “Intelligence is quick-wittedness and understanding; a person may be intelligent without being rational.”⁶ Khalid al-Muslih, in his *Sharḥ al-Uṣūl al-Sittah*, defines it as follows: “Intelligence is acuity of understanding through which a person comprehends matters that are obscure, and there is no connection between intelligence and faith.”⁷ Muhammad al-Khadimi likewise defines it as “the rapid movement of the mind from premises to a conclusion.”⁸

“Intellectual thinkers maintain that intelligence is the best means of understanding existing reality, whereas, in the view of pragmatists, it is a means of forming representations of our actions that assist us in understanding things,”⁹ and “intelligence is the ability to think abstractly.”¹⁰ Therefore, Edouard Claparede considers intelligence to be the capacity for knowledge and the capacity to

adapt to reality. Thurstone ultimately established the concept of intelligence as “the capacity underlying capacities, the aptitude underlying aptitudes, and the general resultant of all primary cognitive mental abilities.”¹¹

2. Linguistic Intelligence

Jaber Abdel Hamid Jaber, in his book *Multiple Intelligences and Understanding*, defines linguistic intelligence as the ability to use words effectively, whether orally, as in the case of a storyteller, orator, or politician, or in writing, as in the case of a poet, playwright, or newspaper editor. This intelligence encompasses the ability to deal with the structure, sounds, and meanings of language and to understand its pragmatic dimensions, or its practical uses. Among these uses is persuasion, namely, employing language to induce others to adopt a particular course of action, as well as memory aids, in which language is used to speak about itself. Indicators of linguistic intelligence are evident among individuals who possess strong skills in areas such as reading and writing, creativity in the use of language, understanding complex terminology, and sensitivity to sounds and rhythms.¹²

3. The Concept of Artificial Intelligence

The term artificial intelligence was first used in 1956 by the scientist John McCarthy, who is credited with coining the term to refer to the ability of computers to simulate human functions such as learning and problem-solving. Artificial intelligence is defined as a computer program capable of making balanced decisions based on the current context to enhance the effectiveness of the decision-making process. To achieve this, an artificial intelligence system must possess a high capacity to simulate human actions, such as image recognition, in addition to requiring substantial processing power and vast quantities of data. Artificial intelligence is also defined as a set of systems that use various technologies, such as data mining, computer vision, language recognition and generation, machine learning, and deep learning, to collect or use data, make predictions or recommendations, or take decisions with varying degrees of autonomy.¹³

The objective is to create machines capable of performing tasks that were previously possible only through human cognition. Technologists have attempted to simulate human knowledge by programming databases into computers, and these technologies are known as large language models. Artificial intelligence is based primarily on machine learning, which focuses on identifying patterns within vast datasets, as well as correlations that may not be immediately apparent to humans. These patterns are subsequently used to make decisions based on predictive analytics. Data scientists also draw upon previous patterns to predict what is likely to occur and how individuals may behave in the future.¹⁴

Several definitions of artificial intelligence may be presented. Goddard considers artificial intelligence to be the ability to benefit from previous experience in solving new problems; that is, this type of intelligence can use previously stored knowledge and experiences to address emerging issues. This is achieved through the use of algorithms and complex mathematical models to analyse available information and data, and then derive patterns and rules to guide the problem-solving process. Stern defines it as “the capacity for mental adaptation to life and its changing circumstances”, as well as the ability to adapt to the surrounding environment by using previous experience as a basis for making sound decisions and developing effective solutions to new problems.¹⁵

George F. Luger, meanwhile, defines it as a field of computer science concerned with the automation of intelligent behaviour, while Patrick Henry Winston describes it as the study of computers that enable us to receive, analyse, and act upon knowledge. Elaine Rich and Kevin Knight regard it as the study concerned with enabling machines to perform functions currently carried out by humans, but to do so better. John McCarthy, by contrast, defines artificial intelligence as the development of a machine or system that simulates intelligent behaviour. These statements highlight the power and usefulness of technology in addressing new challenges in language and other domains through intelligent and effective methods that resemble human performance and, at times, even surpass it.¹⁶

Second: The Concept of University Education: A Terminological Definition

University education is the form of education most closely connected to the problems of society, and it is expected to confront challenges and lead society towards achieving its identity, welfare, and material and moral advancement.¹⁷ The university implements educational policy by providing university education and postgraduate studies, advancing scientific research, undertaking authorship, translation, and publication, and serving society within the scope of its specialisation. Thus, the university's Deanship of Scientific Research undertakes the publication of scientific research as part of its responsibilities, which constitute an important aspect of the university's mission, namely, advancing scientific research and undertaking authorship, translation, and publication.¹⁸ University education also attends to the education of students at universities and provides university lecturers with all educational means necessary to advance teaching and learning. There is no doubt that teaching Arabic, facilitating its acquisition, and making it appealing to learners are indispensable, because teaching the Arabic language is among the matters required by Islamic law, particularly in university education.

The purpose of teaching the Arabic language, its arts, and its literature is to enable every learner to express himself eloquently in this language through speech, oratory, and writing without affectation; to understand the words of its eloquent speakers in both verse and prose; and then to understand the Book of God Almighty, perceive its inimitability through reason and taste, and have the heart affected and humbled by its recitation.¹⁹

Third: Artificial Intelligence in Education

Artificial intelligence, which refers to the ability of machines to learn, infer, and offer options accordingly, is no longer far removed from entering the field of education. Teachers may use it to prepare lessons tailored to each student's personality, as artificial intelligence-based educational software can retain precise data on a student's mental abilities, speed of response, and academic, personal, and cultural preferences. On this basis, the technology can present lessons and administer tests in a manner suited to each student's abilities. This development indicates that technology will not replace the human element; rather, it will deliver theoretical lessons, while the teacher will have more time to communicate with students. Nevertheless, it should be noted that this technology is still in its developmental stages and remains costly, making it difficult for all educational institutions to adopt it at present. The solution may therefore lie in partnerships between educational institutions and major companies that produce these technologies to develop affordable educational solutions within a shorter period.²⁰

Academics and university lecturers have argued that implementing an artificial intelligence strategy in the education sector could bring about a corrective transformation in the educational

system by breaking down traditional models based on rote instruction and developing the teacher's role from that of an employee to that of an expert. Technology can, in certain contexts, intervene more effectively than humans and will undoubtedly continue to develop and become increasingly prevalent in our lives, including in education.

An important question therefore arises: Will artificial intelligence replace the teacher? A definitive answer is difficult to provide at present. Nevertheless, most researchers maintain that the teacher's role will remain, although its practical and pedagogical value will change, becoming more comprehensive and more focused on the social dimensions that machines cannot replace. For many learners, perseverance and motivation continue to derive from human interaction and interpersonal communication.

Artificial intelligence has become one of the most influential emerging technologies across various sectors, making it an essential element in shaping the future. It would be mistaken to reduce it merely to programming that enables machines to act without human intervention. Despite its extensive benefits in education and elsewhere, this technology remains non-human and lacks the consciousness that distinguishes human beings, which preserves the distinctive role of human judgement.

Many researchers consider artificial intelligence and machine learning to contribute to improving the quality of education by creating a new dynamic between student and teacher that enriches the pedagogical process without replacing either party. This means, all the more clearly, that artificial intelligence cannot fully assume the role of the teacher or replace the teacher under any circumstances.²¹

The foregoing discussion indicates that artificial intelligence will become an important part of the educational process, but it will not constitute a complete substitute for the human teacher. Intelligent technologies can personalise learning and improve teaching efficiency, but they remain unable to provide human dimensions such as motivation and emotional and social interaction. Artificial intelligence is therefore expected to play a supporting role that reduces the teacher's workload, while the teacher remains at the centre of the educational process. Ultimately, humans and machines can complement one another without either displacing the other.

Fourth: Benefits of Artificial Intelligence in Higher Education

The tools provided by artificial intelligence technologies have demonstrated their effectiveness, and some have become widely used in universities and secondary schools in Western countries, including virtual reality, augmented reality, and voice assistants. Modern technologies are emerging to identify gaps in the learning process and improve teaching methods in ways that promote academic success. The education sector can benefit from artificial intelligence approaches that enable students to progress more rapidly and efficiently, at a pace suited to the constantly changing demands of the twenty-first century. Artificial intelligence also provides students with diverse resources, including translation tools, voice assistants, chatbots, virtual reality technologies, educational games, personalised teaching, customised curricula, immediate assessment, and feedback. These benefits contribute to the development of global classrooms that accommodate different types of learners, meet their diverse needs, and provide opportunities to integrate ideas across disciplines. Artificial intelligence also offers considerable potential to strengthen specialised, multidisciplinary, and transdisciplinary scientific research by processing

big data, facilitating collaboration among researchers, and creating new methods of research and dissemination of ideas, thereby making innovative solutions easier to access and implement.²²

Artificial intelligence enhances the personalisation of learning in higher education by assessing a student's level of knowledge of a particular subject and designing study programmes suited to the student's knowledge gaps and learning style. This has expanded the possibilities for teaching, learning, and research and improved the quality of education. Artificial intelligence can also provide students with personalised assistance around the clock during enrolment processes and help educational institutions target students most likely to succeed, thereby increasing enrolment and retention rates. In learning and teaching, it supports assignment marking and provides struggling students with supportive resources, allowing faculty members to devote more time to in-depth academic interaction. It also supports student affairs through personalised degree planning and predicting students' academic needs based on previous data. At the institutional level, artificial intelligence assists in collecting data from different university systems to support decision-making and in understanding labour-market needs to develop appropriate curricula. Despite these advantages, artificial intelligence applications entail potential risks arising from the quality of the data used. Such data may be outdated or may not represent all categories of students, which may lead to inaccurate results when systems are applied to different educational environments or student groups. It is therefore necessary to take into account the nature and suitability of the data to ensure the effectiveness of these systems and avoid unintended negative consequences.²³

These developments highlight the importance of artificial intelligence as a driving force for profound transformation in higher education, both in individual learning and in institutional administration. They also point to broad opportunities to enhance efficiency and the quality of education through personalisation, prediction, and intelligent data analysis. At the same time, they draw attention to challenges associated with data quality and with ensuring the fairness and accuracy of outcomes. Hence, adopting these technologies requires a balanced approach that combines their potential with responsible and safe implementation.

Fifth: Advantages and Disadvantages of Artificial Intelligence in University-Level Arabic Language Teaching

a. Advantages of Artificial Intelligence

- Personalising education according to each student's level enables students to receive lessons and activities appropriate to their linguistic level, whether in language grammar or morphology or in literature or Arabic criticism.
- Improving the quality of self-directed learning provides students with tools that enable them to learn Arabic outside the lecture hall through interactive platforms and immediate explanations.
- Providing immediate and accurate feedback helps students correct errors in writing and pronunciation directly, thereby accelerating the improvement of linguistic skills.
- Developing writing and analytical skills supports students in formulating sentences, correcting style, and improving the structure of university-level literary, linguistic, and critical texts.
- Enhancing classroom interaction enables the lecturer to use intelligent activities, such as automated conversations and text analysis, to increase student participation.

- Improving pronunciation and listening skills through speech-recognition systems that help train students in the articulation of sounds and oral expression.
- Assisting the lecturer in preparing lessons by supporting the organisation of content and enriching it with references and scholarly sources appropriate to the subject of study.
- Providing accurate and focused summaries of course content, thereby facilitating the summarisation of lessons and the preparation of presentations in Arabic.
- Clarifying scientific or linguistic ambiguities that the lecturer may encounter while preparing lessons and answering the various questions posed by students clearly and accurately.
- Accelerating progress in explaining lessons by providing immediate and effective support that helps accomplish a greater amount of revision in a short period of time.
- Explaining difficult vocabulary encountered in lessons or in classical Arabic books and dictionaries, while providing accurate linguistic and contextual explanations.
- Supporting the lecturer in preparing academic conference papers and articles intended for publication in academic journals by providing summaries and systematic conclusions on the subjects under study.
- Correcting linguistic errors in academic research presented by students during discussion, while improving Arabic style and quality of expression.
- Assisting university lecturers in evaluating research plans submitted by students and revising and correcting them in accordance with scientific and methodological standards.
- Accelerating lecturers' academic tasks, such as marking assignments, preparing examinations, and compiling results, thereby allowing more time for explaining advanced concepts.

b. Disadvantages of Artificial Intelligence

- The decline of the lecturer's pedagogical and human role: heavy reliance on artificial intelligence for providing explanations or corrections may diminish the lecturer's presence as an influential academic and pedagogical figure in the classroom.
- Reduced control over the authenticity of students' work: as students can easily use intelligent tools to prepare texts and linguistic analyses, lecturers become less able to assess their actual skills.
- The scarcity of accurate Arabic-language resources: the shortage of tools specialised in Arabic and the complexity of its morphological and syntactic structure make reliance on artificial intelligence error-prone, which may create difficulties for lecturers during teaching or correction.
- The need for advanced technical skills: some lecturers lack the training required to use these tools effectively, thereby creating an additional burden rather than allowing the technology to serve as a form of support.
- Excessive reliance on technology: extensive use of artificial intelligence may reduce lecturers' creativity in preparing lessons manually or designing interactive activities based on their linguistic and pedagogical expertise.

- The risk of data bias: artificial intelligence systems may provide incorrect analyses or analyses unsuited to the Arabic linguistic context because they have been trained on insufficient or inaccurate data, placing lecturers in a position of having continually to correct such errors.
- Ethical pressure and new responsibilities: lecturers become responsible for monitoring students' appropriate use of technology and guiding them, which constitutes an additional effort that was not required before the widespread use of artificial intelligence.

Sixth: The Impact of Using Digital Platforms on the Development of Higher Education

a. The Use of the Moodle Digital Platform at the University and Its Impact on the Development of Higher Education Services

The Moodle system in higher education institutions is an advanced e-learning platform that offers a wide range of advantages, most notably flexible learning, access to content at any time and from any location, and enhanced communication and interaction between students and faculty members. The system also supports distance learning, enables the integration of multimedia into courses, and provides effective tools for managing and assessing students' learning, thereby contributing to improving the quality of the educational process, making it more inclusive, and enhancing its capacity to keep pace with the requirements of the modern era.

The Moodle e-learning system is a programme designed to assist in the management, monitoring, and delivery of educational activities and continuing education. It therefore constitutes a strategic solution for planning, teaching, and managing all aspects of learning within an educational institution, including direct communication, virtual classrooms, and faculty-led courses. This, in turn, enables educational activities that were previously separate and isolated from one another to operate within an interconnected system that helps raise the standard of education.²⁴ The use of this system has contributed to improving higher education services through the following:

- Mohammed Seddik Ben Yahia University of Jijel has adopted the Moodle digital platform to assist lecturers in delivering university courses and communicating with students, particularly by uploading lectures delivered during the academic year, which students can access, download, study, and use to prepare for examinations.
- Lecturers at Mohammed Seddik Ben Yahia University of Jijel engage with the Moodle digital platform, as do students, because it has facilitated students' access to all lectures delivered in lecture halls. It has also facilitated distance learning for many students who study remotely or are unable to attend lectures at their scheduled times.
- The use of the Moodle digital platform contributes to developing and improving the pedagogical services provided by the University of Jijel by offering learning pathways adapted to the university student's level and needs within their specialisation—Arabic language.

A field study conducted with students on the extent of their use of the Moodle platform produced the following results:

- The platform enables students to review lessons at any time, even in cases of absence, as complete explanations are available, thereby facilitating revision, particularly during examination periods.
- Moodle enables direct communication with the lecturer, allowing students to send their questions immediately without having to seek out the lecturer in person.

- Moodle has made assignments easier, as students can complete and upload their assignments electronically and can also view their marks directly through the platform.
- Moodle can benefit students who feel uncomfortable asking questions in class, as it enables them to submit questions through the platform without the constraints of speaking in the classroom.
- Moodle has facilitated university study by enabling discussions in forums, file sharing, and collaborative revision at a distance.
- Moodle provides all important announcements, such as changes to schedules, absences, assignments, lecture times, or replacement sessions, ensuring that students do not miss any necessary information.

The study conducted by Nabil al-Sayyid Muhammad is among the most prominent studies addressing the Moodle learning management system. It aimed to identify the effectiveness of an electronic course in developing skills in using the Moodle system and its impact on cognitive achievement among a purposive sample of twenty male and female postgraduate students at the Faculty of Education, Benha University. The researcher designed the electronic course using the Moodle system, and the results obtained through the study instruments demonstrated an increase in the level of cognitive achievement among the sample participants. In 2012, Uthman Mazin Dahlan also conducted a study aimed at identifying the effectiveness of a programme enhanced by the Moodle system in developing daily planning skills among basic education students. The researcher administered a post-achievement test to a sample of sixty students, who were divided into two groups: experimental and control. The results revealed statistically significant differences between the mean scores of the two groups on the post-test in favour of the experimental group. Khalid Abd al-Latif Muhammad Imran likewise conducted a quasi-experimental study aimed at identifying the effectiveness of a proposed electronic course in methods of teaching social studies on the achievement of a sample comprising forty-five male and female students. The electronic course was delivered through an educational website on the Internet, and the results of the achievement test indicated statistically significant differences between the mean scores of the sample members before and after studying the course, in favour of the post-test.²⁵

b. The Use of the PROGRES Platform at the University and Its Impact on the Development of Higher Education Services

As part of Algeria's efforts to advance digital transformation and digitise its various sectors, the PROGRES system was established to support the higher education sector in cooperation with the European Union. The Ministry of Higher Education and Scientific Research has worked to digitise institutions across the sector to benefit from the advantages offered by information and communication technologies. The project was launched in 2012 with a study of higher education functions and was first used in 2016 to register new baccalaureate holders, including international students who were able to register remotely, as well as to provide access to certain university services such as transport, accommodation, and transfers.

Since 2016, the various functions covered by the system have been introduced progressively. PROGRES is an integrated information system that enables comprehensive management of university life to enhance services within universities. These functions include the registration, orientation, and transfer of new students; the provision of data relating to pedagogical matters; and the comprehensive retention of students' academic records. Developed by the Ministry of

Higher Education, the system is intended to improve the quality of services provided to the university community, including students, lecturers, and administrative staff. It also supports student registration and orientation, human-resource management, staff career management, training programmes, finance and accounting, and scientific research.

Results of the Field Study on the PROGRES System at Mohammed Seddik Ben Yahia University

First: About Students

- The PROGRES system constitutes the official and reliable portal through which students consult their course marks and university averages.
- It enables students to verify the successful completion of electronic registration procedures and to benefit from various university services, such as catering, accommodation, and participation in competitions and cultural activities.
- It provides students with a simplified mechanism for submitting appeals, whether concerning marks, changes of specialisation, or resit examinations.
- It enables students to access their complete academic records, including information concerning their group, academic year, and study programme.

Second: About Lecturers

- The system facilitates the electronic entry of students' marks without requiring lecturers to be physically present at the university.
- It enables lecturers to distinguish between types of examinations, such as practical and regular assessments, when entering marks.
- It eliminates the need for lecturers to prepare paper forms relating to students, as the system provides them in a ready-made and numbered format.
- It assists in organising final deliberations and accurately correcting marks.
- It enables lecturers to record their entry to and exit from the university during teaching electronically and remotely.
- It facilitates the entry of students' resit examination marks on the platform.
- It supports the ranking and electronic registration of students admitted to doctoral programmes.

Third: About the Administration

- It facilitates the calculation and confirmation of students' final averages.
- It assists administrative staff in entering marks accurately and systematically in the designated fields.
- It supports the more efficient preparation of students' final evaluations.
- It supports the attendance-signing procedure used to confirm employees' physical presence at work.

Conclusion

In light of the foregoing discussion of artificial intelligence in higher education, this technology has become an important element in the development of the educational process because of the broad possibilities it offers for improving learning and supporting both lecturers and students. Nevertheless, its adoption requires awareness of both its advantages and its limitations, together with a balanced and informed approach. The principal findings are as follows:

- Artificial intelligence contributes to the development of teaching methods by personalising learning to each student's abilities and individual needs.
- It helps improve teaching efficiency by providing intelligent lessons and assessments, thereby giving teachers more time for human interaction and pedagogical guidance.
- It provides advanced educational tools, such as virtual reality, voice assistants, and chatbots, thereby enhancing the learning experience in higher education.
- It supports scientific research through big data analysis, facilitated collaboration among researchers, and the development of innovative methodologies.
- It enables universities to predict students' academic needs and provide personalised services, thereby improving success and enrolment rates.
- Despite its benefits, it entails risks relating to data quality, bias, and privacy, which necessitate clear governance and ethical controls to ensure responsible use.
- It improves the quality of self-directed learning and provides interactive tools that help students develop their skills outside the classroom.
- It provides students with immediate and accurate feedback, thereby accelerating the development of their linguistic and analytical skills.
- It assists lecturers in preparing lessons, organising content, enriching it with scholarly sources, and accelerating routine academic tasks.
- It develops classroom interaction through intelligent activities based on text analysis and automated conversations.
- It enhances scientific research through big-data analysis and the provision of summaries and conclusions that support lecturers and students.
- Despite its benefits, excessive reliance on artificial intelligence may lead to a decline in the pedagogical and human role of the university lecturer.
- Its use requires clear governance and technical and ethical skills to ensure responsible implementation and reduce risks relating to bias and privacy.
- The adoption of digital platforms such as Moodle and PROGRES represents a pivotal step in modernising the higher education system and enabling it to keep pace with digital transformation.
- The Moodle platform has contributed to improving university learning by providing access to course content, enhancing interaction, and supporting distance education, thereby improving the effectiveness of both students and lecturers.
- Studies have demonstrated that the use of Moodle has a positive impact on cognitive achievement and the development of educational skills.
- The platform has enabled students to overcome numerous obstacles, such as difficulties in attending classes, reluctance to ask questions, and limitations in traditional pedagogical follow-up.
- The PROGRES system has consolidated the concept of digital administration of university services by facilitating registration, orientation, transfers, and the preservation of students' academic records.
- The digitisation of university services through PROGRES has improved transparency, speed, and accuracy in managing students' files.

Thus, the adoption of these platforms constitutes a fundamental pillar for advancing the quality of higher education and supports university institutions in addressing the challenges of the digital age.

Bibliography

- Al-Azhari. *Tahdhib al-Lughah*. Edited by Muhammad Awad Murib. Vol. 10. Beirut: Dar Ihya al-Turath, 2001.
- Al-Farahidi, al-Khalil ibn Ahmad. *Al-Ayn*. Vol. 5. Dar wa-Maktabat al-Hilal, 1431 AH.
- Al-Khadimi, Muhammad. *Bariqah Mahmudiyyah fi Sharh Tariqah Muhammadiyyah wa-Shariah Nabawiyyah fi Sirah Ahmadiyyah*. Vol. 2. Al-Halabi Press, 1348 AH.
- Al-Muslih, Khalid. *Sharh al-Usul al-Sittah*. Audio lectures. Islamweb, 1431 AH.
- Al-Razi, Fakhr al-Din. *Mafatih al-Ghayb, or al-Tafsir al-Kabir*. Vol. 2. Beirut: Dar Ihya al-Turath al-Arabi, 1420 AH.
- Al-Umrani. *Al-Intisar fi al-Radd ala al-Mutazilah al-Qadariyyah al-Ashrar*. Edited by Saud ibn Abd al-Aziz al-Khalaf. Vol. 1. Riyadh and Mecca: Adwa al-Salaf, 1999.
- Al-Zayyat, Ahmad Hasan. *Al-Risalah*. No. 1025. 9 Rabi al-Awwal 1432 AH. Vol. 136.
- Al-Zboon, Mamoun Saleem Odeh. "The Degree of Awareness of Jordanian University Students for Courses Electronic System (Moodle) and Its Relationship with Some Variables." *Arab Journal for Quality Assurance in Higher Education* 9, no. 25 (2016): 91–113.
<https://doi.org/10.20428/AJQAHE.9.3.4>.
- Babah, Houria. "Istikhdamat al-Dhaka al-Istinai fi Qita al-Talim al-Ali: Qiraah Susiulujiyyah." *Annales de l'Université d'Alger* 38, no. 3 (2024): 118–126.
- Bedboudi, Sihem. "Research Trends on the Topic of Employing Artificial Intelligence in the Field of Education: An Analytical Study of a Sample of Articles Published on the Algerian ASJP Platform." *Atras* 5, no. 3 (2024): 817–829.
- Bekkari, Mokhtar. "Tahaddiyat al-Dhaka al-Istinai wa-Tatbiqatuhu fi al-Talim." *Majallat al-Muntada lil-Dirasat wa-al-Abhath al-Iqtisadiyyah* 6, no. 1 (2022): 286–305.
- Benchaa, Nadia, Aicha Bouthaldja, and Fatima Zohra Gharbi. "Athar Istikhdam al-Ardiyyah al-Raqmiyyah Moodle fi Tatwir al-Talim al-Ali: Jamiat Hassiba Ben Bouali bi-Chlef Namudhajan." *Majallat Tanafusiyyat al-Muassasat al-Saghirah wa-al-Mutawassitah* 4, no. 1 (2023): 134–150.
- Boudiar, Chaima. "Al-Dhaka al-Istinai fi Khidmat al-Lughah al-Arabiyyah: Musaid al-Kitabah al-Dhaki lil-Lughah al-Arabiyyah Namudhajan." *Al-Maqasid fi al-Lughah wa-al-Adab* 3, no. 1 (2024): 58–82.
- Duwaydiri, Raja Wahid. *Al-Bahth al-Ilmi: Asasiyyatuhu al-Nazariyyah wa-Mumarasatuhu al-Amaliyyah*. Beirut: Dar al-Fikr al-Muasir, 2000.
- Hamad, Abd Allah Khidr. *Al-Kifayah fi al-Tafsir bi-al-Mathur wa-al-Dirayah*. Vol. 2. Beirut: Dar al-Qalam, 2017.
- Ibn Durayd. *Al-Ishtiqaq*. Edited by Abd al-Salam Muhammad Harun. Beirut: Dar al-Jil, 1991.
- Ibn Durayd. *Jamharat al-Lughah*. Vol. 2. Beirut: Dar al-Ilm lil-Malayin, 1987.
- Jaber, Jaber Abdel Hamid. *Al-Dhakaat al-Mutaaddidah wa-al-Fahm: Tanmiyah wa-Tamiq*. Cairo: Dar al-Fikr al-Arabi, 2003.
- Latroche, Amina. "Application of Artificial Intelligence in Higher Education: Benefits and Challenges." *Al-Turath* 15, no. 2 (2025): 11–22.

Majallat al-Buhuth al-Islamiyyah. Vol. 27. General Presidency of Scholarly Research, Ifta, Dawah, and Guidance, 1433 AH.

Rida, Muhammad Rashid, et al. *Al-Manar*. Vol. 14. 8 Dhu al-Hijjah.

Yalcin, Mikdad. *Ilm al-Akhlaq al-Islamiyyah*. Riyadh: Dar Alam al-Kutub, 1992.

Endnotes

Notes

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1. Al-Azhari, *Tahdhib al-Lughah*, ed. Muhammad Awad Murib (Beirut: Dar Ihya al-Turath, 2001), 10:184.
 2. Al-Khalil ibn Ahmad al-Farahidi, *Al-Ayn* (Dar wa-Maktabat al-Hilal, 1431 AH), 5:399; see also Al-Azhari, *Tahdhib al-Lughah*, 184.
 3. Ibn Durayd, *Jamharat al-Lughah* (Beirut: Dar al-Ilm lil-Malayin, 1987), 2:701.
 4. Ibn Durayd, *Al-Ishtiqaq*, ed. Abd al-Salam Muhammad Harun (Beirut: Dar al-Jil, 1991), 187.
 5. Fakhr al-Din al-Razi, *Mafatih al-Ghayb, or al-Tafsir al-Kabir* (Beirut: Dar Ihya al-Turath al-Arabi, 1420 AH), 2:423.
 6. Abd Allah Khidr Hamad, *Al-Kifayah fi al-Tafsir bi-al-Mathur wa-al-Dirayah* (Beirut: Dar al-Qalam, 2017), 2:393.
 7. Khalid al-Muslih, *Sharh al-Usul al-Sittah*, audio lectures, Islamweb, 1431 AH, 1:2.
 8. Muhammad al-Khadimi, *Bariqah Mahmudiyyah fi Sharh Tariqah Muhammadiyyah wa-Shariah Nabawiyyah fi Sirah Ahmadiyyah* (Al-Halabi Press, 1348 AH), 2:36.
 9. Ahmad Hasan al-Zayyat, *Al-Risalah*, no. 1025 (9 Rabi al-Awwal 1432 AH), 136:32.
 10. Raja Wahid Duwaydiri, *Al-Bahth al-Ilmi: Asasiyyatuhu al-Nazariyyah wa-Mumarasatuhu al-Amaliyyah* (Beirut: Dar al-Fikr al-Muasir, 2000), 120.
 11. Mikdad Yalcin, *Ilm al-Akhlaq al-Islamiyyah* (Riyadh: Dar Alam al-Kutub, 1992), 179.
 12. Jaber Abdel Hamid Jaber, *Al-Dhakaat al-Mutaaddidah wa-al-Fahm: Tanmiyah wa-Tamiq* (Cairo: Dar al-Fikr al-Arabi, 2003), 10.
 13. Sihem Bedboudi, "Research Trends on the Topic of Employing Artificial Intelligence in the Field of Education: An Analytical Study of a Sample of Articles Published on the Algerian ASJP Platform," *Atras* 5, no. 3 (2024): 818.
 14. Houria Babah, "Istikhdamat al-Dhaka al-Istinai fi Qita al-Talim al-Ali: Qiraah Susiulujiyyah," *Annales de l'Université d'Alger* 38, no. 3 (2024): 119.
 15. Chaima Boudiar, "Al-Dhaka al-Istinai fi Khidmat al-Lughah al-Arabiyyah: Musaid al-Kitabah al-Dhaki lil-Lughah al-Arabiyyah Namudhajan," *Al-Maqasid fi al-Lughah wa-al-Adab* 3, no. 1 (2024): 61.
 16. Boudiar, "Al-Dhaka al-Istinai fi Khidmat al-Lughah al-Arabiyyah," 61.
 17. *Majallat al-Buhuth al-Islamiyyah* 27 (1433 AH): 234, General Presidency of Scholarly Research, Ifta, Dawah, and Guidance.
 18. Al-Umrani, *Al-Intisar fi al-Radd ala al-Mutazilah al-Qadariyyah al-Ashrar*, ed. Saud ibn Abd al-Aziz al-Khalaf (Riyadh and Mecca: Adwa al-Salaf, 1999), 1:4.
 19. Muhammad Rashid Rida et al., *Al-Manar* 14 (8 Dhu al-Hijjah): 801.
 20. Mokhtar Bekkari, "Tahaddiyat al-Dhaka al-Istinai wa-Tatbiqatuhu fi al-Talim," *Majallat al-Muntada lil-Dirasat wa-al-Abhath al-Iqtisadiyyah* 6, no. 1 (2022): 292.
 21. Bekkari, "Tahaddiyat al-Dhaka al-Istinai wa-Tatbiqatuhu fi al-Talim," 292.

22. Amina Latroche, "Application of Artificial Intelligence in Higher Education: Benefits and Challenges," *Al-Turath* 15, no. 2 (2025): 11–22.
23. Bekkari, "Tahaddiyat al-Dhaka al-Istinai wa-Tatbiqatuhu fi al-Talim," 292.
24. Mamon Saleem Odeh Al-Zboon, "The Degree of Awareness of Jordanian University Students for Courses Electronic System (Moodle) and Its Relationship with Some Variables," *Arab Journal for Quality Assurance in Higher Education* 9, no. 25 (2016): 95, <https://doi.org/10.20428/AJQAHE.9.3.4>.
25. Nadia Benchaa, Aicha Bouthaldja, and Fatima Zohra Gharbi, "Athar Istikhdam al-Ardiyyah al-Raqmiyyah Moodle fi Tatwir al-Talim al-Ali: Jamiat Hassiba Ben Bouali bi-Chlef Namudhajan," *Majallat Tanafusiyyat al-Muassasat al-Saghirah wa-al-Mutawassitah* 4, no. 1 (2023): 136.