

# The Use of Artificial Intelligence in Records Management at Higher Education Institutions: An Analytical Theoretical Study

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## Abstract:

This analytical theoretical study explores the transformative impact of artificial intelligence (AI) on records management within higher education institutions, focusing on document handling and administrative operations. This scientific paper aims to elucidate the potential benefits derived from AI applications in modernizing document management processes and controlling the document life cycle within educational institutions. Employing an analytical approach and drawing on various scientific research, the study emphasizes the importance of harnessing AI technology in this context. It reveals significant advantages, such as streamlined workflows and enhanced student experiences, underscoring AI's pivotal role in reshaping the records management landscape in higher education.

**Key words:** artificial intelligence (AI), records management, higher education institutions



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## Introduction

The incorporation of cutting-edge technologies becomes essential in the constantly changing world of information management. Artificial Intelligence (AI) stands out among these technologies as a driver for transformation with enormous potential. In higher education institutions, the nexus between AI and records management is of special relevance. This scholarly investigation aims to clarify the theoretical foundations and analytical aspects of using AI to records management in the context of higher education.

There are persistent inherent challenges in traditional approaches to records management within academic institutions. The rapid increase in digital information combined with the complex nature of institutional records frequently leads to inefficiencies in retrieving, categorizing and preserving such records. Acknowledging these difficulties is important for understanding how artificial intelligence applications could impact higher education records management. The ability of AI to adapt and evolve through continuous learning aligns seamlessly with the dynamic nature of information within academic settings. However, as we navigate this intersection, questions arise regarding the ethical implications, the need for transparent governance, and the balance between automation and human oversight in records management processes. These considerations underscore the complexity of the theoretical landscape we aim to explore, providing a foundation for a nuanced understanding of AI's impact on higher education records management.

### The Critical Importance:

This study is critical because it endeavors to illuminate the theoretical underpinnings and analytical dimensions of integrating AI in records management within higher education institutions. By exploring the potential benefits of AI applications. The results hold the prospect of advancing both the field's theoretical understanding and offering useful suggestions for higher education records management decision-makers.

### The Objective:

This study intends to bridge the gap between traditional practices and the revolutionary potential of AI by providing a balanced perspective on the importance of using such technology in records management for the benefit of post-secondary education environments. It also seeks to offer valuable insights for enhancing the efficiency, accuracy, and strategic utilization of records in academic settings.

### Problem Statement:

The strategic incorporation of AI in records management processes has the potential to revolutionize how information is handled, assessed, and leveraged within academic institutions. It offers unprecedented efficiency in sorting, categorizing, and safeguarding records, thereby influencing the overall operational dynamics of higher education organizations. However, as we delve into this promising realm, a critical

problem emerges: How beneficial can the implementation of AI be in enhancing records management practices for higher education institutions?

### 1. literature review:

**Study 1:** Mashilo Thomas, M. (2021). *Utilizing artificial intelligence technology for the management of records at the Council for Scientific and Industrial Research in South Africa*. [PHD Thesis].

**Study 2:** Fayaz Ahmad, S., Alam, M., Rahmat, M., Mubarik, M., & Hyder, S. (2022). Academic and Administrative Role of Artificial Intelligence in Education. *Sustainability*. [Article].

	Purpose	Methodology	Results/Features	Disadvantages
Study 1	Investigating the use of AIT for records management at the CSIR in South Africa	Convergent mixed methods with parallel sampling of participants utilized multiple data collection techniques such as: interviews, questionnaire, and document analysis	<p>the key results:</p> <ul style="list-style-type: none"> <li>-Review found ineffective records management at CSIR.</li> <li>-AI would enhance digital records management.</li> <li>-Cloud storage and robotic machines recommended.</li> </ul> <p>The key features:</p> <ul style="list-style-type: none"> <li>-Reviewed current records management system at CSIR using system analysis.</li> <li>-Integrated quantitative and qualitative findings to reveal ineffective records management.</li> <li>-Recommended AI technology framework to improve CSIR records management.</li> </ul>	<ul style="list-style-type: none"> <li>- Small sample size of only 8 participants limits generalizability of the results. A larger and more diverse sample could yield more robust findings.</li> <li>- Does not provide granular technical guidance on designing the AI systems proposed. More implementation details are needed.</li> </ul>
Study 2	Explores academic and administrative applications of AI that can be in education.	Literature review and conceptual analysis.	<p>The key results:</p> <ul style="list-style-type: none"> <li>- AI reduces administrative workload for teachers.</li> <li>- AI has significant potential in education.</li> </ul> <p>The key features:</p> <ul style="list-style-type: none"> <li>- Analyzes how AI can assist with both academic activities and administrative tasks</li> <li>-Assesses the potential benefits of AI in enhancing student learning, reducing teacher workload, and improving educational efficiency.</li> </ul>	<ul style="list-style-type: none"> <li>-It has not been strengthened by some examples of implementation.</li> <li>-Lacks concrete guidance on challenges of integrating AI in records management.</li> </ul>

In comparing the two previous studies with our current study, we find that the latter has addressed the subject of artificial intelligence in higher education from a different angle. It has focused on the field of administration, specifically on the adoption of artificial intelligence in records management at higher

education institutions, which will positively impact the educational process and the outputs of higher education institutions, as well as their reputation, if this modern technology is intelligently employed in the area of records management. Subsequently, this could enable advanced control over information flows.

## 2. Theoretical concepts:

**2.1. Artificial Intelligence (AI):** Odlis dictionary defines AI as: “Mechanical and electronic devices and applications designed to closely mimic the human ability to learn, reason, and make decisions. AI is used in voice recognition technology, expert systems, natural language and foreign language processing, and robotics.”(Reitz, 2014, Omer, 2024, Al-Ghobesi, 2025, Ahmed, 2025)

AI is defined as a branch of computer science that focuses on the creation of intelligent machines that function similarly to HI.(Mashilo Thomas, 2021)

In line with the above definitions, we understand that: AI encompasses mechanical and electronic devices and applications intricately designed to replicate human cognitive functions, including learning, reasoning, and decision-making. As a pivotal branch of computer science, AI is fundamentally concerned with developing intelligent machines that emulate the functionalities of Human Intelligence (HI). This involves the creation and implementation of algorithms and systems capable of cognitive processes, contributing to the advancement of technology in various fields.

**2.2. Records Management:** is the branch of management that is in charge of the competent and systematic control of the creation, reception, preservation, use, and disposition of records, as well as the procedures for understanding and preserving evidence of and information about commercial functions and transactions in the records process. Records management is based on notions such as the records life cycle and the records continuum.(Mashilo Thomas, 2022)

According to this definition, we can say that records management constitutes a discipline within management practices that assumes responsibility for the proficient and methodical oversight of the entire life cycle of records. This encompasses the systematic control of records from their creation and reception through to preservation, utilization, and eventual disposition.

## 3. The use of AI in Administration Records Management:

AI has significant promise for use in the administration management of records. The evolution of AI-assisted text production, represented by for example GPT-3, allows the algorithm to emulate domain-

specific writing styles, assisting in the synthesis of legal writings. Second, machine-learning systems that use semantic algorithms look for rules in legal texts autonomously, presenting and applying them in an intelligible manner. These algorithms can forecast choices for administrative procedures by using metadata and fact-of-the-case assessments. (Parycek et al., 2023, Mleiki, 2025)

AI can be utilized to manage records for the administration in a variety of ways, including:

- Automated classification and categorization: AI can assess and categorize records based on their content, information, and context. This aids in more efficiently arranging and categorizing records, making them easier to obtain and manage.
- Intelligent search and retrieval: Search algorithms enabled by AI can interpret natural language queries and return more accurate and relevant search results. This allows users to find the records they need fast, saving time and effort.
- Data extraction and indexing: AI can automatically extract relevant information from records and generate indexes, making it easier to find specific data within a record or across numerous records.
- Automated retention and disposal: AI can help determine the proper retention periods for various types of records depending on legal and regulatory requirements. It can also identify records that are eligible for destruction, ensuring that retention requirements are followed.
- Data privacy and security: AI can aid in the identification and protection of sensitive information inside records, such as personally identifiable information (PII) or confidential data. It can detect and highlight potential privacy or security breaches, hence improving data protection.
- Predictive analytics: AI can evaluate patterns and trends within records to generate insights and predictions through predictive analytics. Making educated decisions, detecting potential dangers, and streamlining records management processes can all benefit from this. (Rolan et al., 2019)

Comprehensively, by automating, AI can dramatically increase the efficiency, accuracy, and efficacy of records administration. So, there are various uses of AI in records administration. To begin, AI, as represented by GPT-3, mimics writing styles, assisting in the synthesis of legal papers. Furthermore, machine-learning systems that use semantic algorithms read legal documents autonomously, presenting regulations in a comprehensible manner and forecasting administrative process alternatives. AI also has practical applications in records management, including automated classification, intelligent search, data extraction, automated retention, privacy and security enhancement, and predictive analytics. These features improve efficiency, accessibility, compliance, and decision-making in records management processes.

#### 4. The Importance of AI in Records Managements at Higher Educational Institutions:

Document management is one area where artificial intelligence has the potential to significantly improve education. Administrators and teachers are increasingly confronted with a deluge of data, documentation, and student records. All of this information must be organized and secured. Student information privacy is mandated by law; therefore, document management solutions must be fully compliant with all relevant legislation.

These documents can be managed much more efficiently with the help of artificial intelligence. AI-powered document management solutions can handle massive volumes of content thanks to the power of machine learning – where the computer learns and improves as it works. This technology also allows for improved reporting. AI systems can find trends and patterns in data by watching it. (Kelley Connect, 2020, Alasmari, 2023)

The growth of technology and as information is scattered across different systems, the proliferation of technology and data on college campuses confronts obstacles. AI tackles this issue by making campuses more linked, allowing institutions to access data from many platforms. AI applications aid in refining course offerings and increasing student retention. As data from numerous campus systems is combined, AI-driven "hyper-learning" opportunities emerge, facilitating informed decision-making. Overall, AI improves the effectiveness of student success tools and adds to better higher education decision-making. (Klutka et al., n.d.)

Higher education institutions can benefit from AI in administrative record management in the following ways:

- Improved Efficiency: AI can automate time-consuming administrative operations like data entry, document management, and record retrieval. Administrative staff saves time, allowing them to focus on more strategic and value-added initiatives.
- Intelligent Document Classification: AI algorithms can classify and categorize many sorts of documents, making record organization and retrieval easier. This improves record management accuracy and speed.
- Improved Accuracy: AI algorithms can reduce errors caused by manual data entry and record maintenance. This enhances the correctness and dependability of administrative records, lowering the likelihood of data discrepancies or errors.

- **Streamlined Processes:** By automating regular operations like record retention and disposal, document classification, and search and retrieval, AI can optimize administrative workflows. This improves operating efficiency while decreasing administrative load.
- **Data-Driven Decision Making:** AI-powered analytics can mine vast amounts of administrative data for important insights and patterns. This enables higher education institutions to make data-driven decisions including finding patterns in student performance, forecasting enrollment trends, and optimizing resource allocation.
- **Streamlined Workflows:** AI can automate common administrative operations. This allows administrative personnel to concentrate on more difficult and value-added operations.
- **Enhanced Student Experience:** AI applications in administrative record management can enhance the student experience by delivering individualized services and assistance. AI-powered chatbots, for example, can assist students with questions, admissions processes, and course selection, increasing their engagement. (Fayaz Ahmad et al., 2022)

Accordingly, we can conclude that the integration of AI in document management is pivotal for higher education institutions. It not only handles data volume, but it also improves efficiency and decision-making. AI's significance in connecting campuses, streamlining procedures, and providing individualized student experiences highlights the technology's critical role in modern educational record management.

##### 5. Initiatives for AI in Higher Education Records Management:

Higher education institutions and technology providers have recognized the vast potential of AI for transforming records management and have spearheaded various initiatives to promote adoption. Some notable examples include:

**The Digital Records Project by MIT Libraries:** This project explores AI for automating the appraisal, arrangement, description and delivery of archival collections. Computer vision and NLP are applied to extract information from records and automate processing. The goal is to expand access to archival materials at lower costs. (MIT Libraries, n.d.)

**Jisc Intelligent Campus Program:** Bolton College implemented the Ada Chabot integrated with internal systems to offer tailored responses on academic issues to students and staff; inspired by this, Jisc's national AI center piloted an in-house developed Chabot across four UK colleges to respond user inquiries by

mimicking Ada's customized design. This automates responses for frequently asked questions, directing only complex inquiries to staff. Early pilots indicate considerable time savings. (Jisc, 2022)

UC Office of the President's Intelligent Process Automation: This University of California system-wide initiative focuses on robotic process automation, machine learning and AI for streamlining administrative tasks. use cases include automated student communications for enrollment, graduation etc. and simplifying procurement workflows. (UC Presidential Working Group on AI, 2021)

Ellucian Ethos Platform: Ethos integrates AI and analytics into Ellucian's student information systems for higher education. It provides predictive insights on student engagement, success and outcomes while optimizing workflows like admissions. Clients have achieved up to 35% efficiency gains using Ethos. (Ellucian, 2023)

## 6. Standards for AI Adoption in Higher Education Records Management:

The adoption of standards and best practices is critical for ensuring the ethical, transparent and accountable use of AI for records management in higher education. Some of the relevant standards include:

ISO Records Management Standards: ISO 15489 provides guidance for records management principles and ISO 23081 deals with metadata for records. Compliance with these standards enables the effective application of AI for records classification, retention and disposition. (ISO, 2016)

NIST AI Risk Management Framework: NIST outlines processes for AI trustworthiness covering areas like data governance, model documentation, bias testing etc. Adhering to such risk management best practices is vital when deploying AI algorithms for sensitive tasks like student record processing. (Tabassi, 2023)

Diversity, Equity and Inclusion Principles: DEI guidelines, like the ones from ACM and OECD, provide standards for mitigating algorithmic bias and ensuring just outcomes, especially for marginalized communities. Following such principles helps develop ethical AI systems for higher education. (OECD, 2019)

EU Ethics Guidelines for Trustworthy AI: Formulated by the EU's High-Level Expert Group, these principles champion values-based AI that is lawful, ethical and robust. Implementing transparency, oversight and accountability measures as recommended facilitates responsible use of AI for records management. (EU, 2019)

Compliance with pertinent records management, archival, risk management and ethical AI standards allows higher education institutions to responsibly unlock the advantages of AI while addressing associated risks and limitations.

## 7. Obstacles to AI Adoption in Higher Education Records Management:

While AI has immense potential to transform higher education records management, there are also notable obstacles impeding rapid and widespread adoption:

**Data Privacy Concerns:** Apprehension persists about the privacy risks with allowing AI systems to access student records containing sensitive personal data like grades, disabilities, finances etc. Developing solutions compliant with regulations like FERPA is key. (Popenici & Kerr, 2017)

**Bias and Fairness Challenges:** Since AI algorithms can perpetuate and amplify existing societal biases, their use for administrative decision-making raises concerns about equitable treatment, especially for marginalized student groups. Ongoing biases need redressal. (Green et al., 2022)

**Lack of Skills and Understanding:** Most higher education records management staff lack fluency with AI technologies. Substantial training and change management is imperative for successful adoption within administrative teams. (Webb et al., 2021)

**Costs and Infrastructure Requirements:** Migrating paper-based processes to AI-managed electronic systems requires major technology investments in digitization, storage, software and integration. Ongoing costs like vendor fees and subscriptions are also considerable. (Khan & Al-Yasiri, 2016)

**Resistance to Workforce Disruption:** As AI takes over repetitive administrative tasks, higher education staff may perceive job loss risks and hence resist transitioning to automated systems, hampering adoption. Leadership must proactively address such workforce concerns. (Clay, 2018)

**Algorithmic Transparency Issues:** The 'black box' nature of some AI systems obscures how they arrive at outputs. Such opacity heightens accountability risks surrounding administrative decisions. Human oversight and explainable AI methods are essential. (Robertson & Wagner, 2021)

**Cybersecurity Vulnerabilities:** Like other software systems, AI applications used for records management can be susceptible to hacking, ransomware and data leaks. Robust cybersecurity protections are paramount. (Horizon, 2022)

Overcoming these barriers necessitates multifaceted strategies encompassing ethics, skills development, change management, infrastructure upgrades, cybersecurity investments and governance reforms. With deliberate efforts, AI's benefits can be secured while addressing the risks and limitations impeding adoption.

## 8. The Results:

- ✓ The study showed that artificial intelligence can be exploited in several records management processes.
- ✓ Artificial intelligence has the ability to improve and develop the process of making good use of documents.
- ✓ Artificial intelligence provides several techniques that can be used to control and manage a wealth of information, processing and managing documents.
- ✓ The reliance of higher education institutions on artificial intelligence techniques to manage their documents contributes to helping administrative employees organize their administrative tasks.
- ✓ The use of artificial intelligence in document management enables higher education institutions to develop their administrative side and provide better services, whether to their administrative staff or to students.
- ✓ Artificial intelligence can be used to manage the documents of higher education institutions in several processes, such as registering students and controlling their files. Ease of retrieving information and documents, which helps in decision-making, organizing programs and completing routine work.
- ✓ Exploiting technology to develop the administrative side of higher education institutions helps in developing their outcomes and increases their visibility.
- ✓ The study proves that using AI in RM is important for higher education institutions development especially at this digital age.

## 9. Recommendations:

- All institutions in general and higher education institutions in particular should place great importance on developing the administrative aspect and working to keep pace with the changes of the times.
- Using modern technology to develop university administration and services.
- Ensure to give greater importance to the field of document management and work to improve it.

- Working on using artificial intelligence technology in document management for higher education institutions in order to develop their administrative aspect
- It is necessary to work on training administrators and document specialists to deal with artificial intelligence technology to develop administrative services
- Ensuring keeping pace with the development of the times and making good use of modern technology for the benefit of higher education institutions
- Making good use of artificial intelligence technology to carry out document management tasks more effectively to provide services to students
- Ensuring the proper management of information and documents of the higher education institution in order to preserve its institutional memory
- Invest in digitization initiatives to convert paper-based records into digital formats that can be incorporated into AI systems. This builds the data foundation needed for AI-enabled records management.
- Start with pilot projects focused on targeted use cases like automating student data management. Validate value delivery before expanding AI to other processes.
- Leverage cloud solutions and vendors to offset upfront infrastructure investments. However, retain ownership of data and AI models.
- Comply with standards like ISO records management principles, SAA guidelines for AI-based archiving, and AI ethics best practices.
- Promote explainable and transparent AI where administrators can understand how algorithms arrive at outputs affecting students.

### Conclusion:

In conclusion, this analytical theoretical examination underscores AI's vital role in transforming records management in higher education. The study systematically demonstrated how AI-enabled enhancements in document processing, administrative functions, and decision-making are instrumental for improving efficiency, accuracy and overall efficacy of records management. Also, it has stated some initiatives and the standards of using AI, in addition to the obstacles that may be encountered when applying AI in records management. The observed advantages, spanning accelerated workflows to enriched student experiences, validate AI's revolutionary impact in modernizing higher education record management. The study has reached some results such as:

- Artificial intelligence can be applied to many records management processes to improve efficiency and consistency.

- AI has the capability to enhance how institutions organize, utilize and control their information resources.

- By leveraging machine learning and natural language processing, AI can facilitate automated categorization, digitization, upkeep, storage, finding and evaluation of records.

As institutions tackle surging data volumes, AI emerges as an indispensable instrument not just for managing records at scale but also for fostering a more connected, responsive and insightful administrative apparatus. With concerted efforts to promote ethical, accountable AI and address adoption barriers, higher education can harness the full potential of artificial intelligence to revolutionize records management practices.

However, we must also remain cognizant of the pragmatic challenges involved in integrating AI within higher education record systems, including data privacy risks, algorithmic bias issues, infrastructure costs, workforce disruption, and ethical concerns surrounding transparency and accountability. A measured approach is imperative, embracing AI's benefits while proactively addressing its limitations through comprehensive strategies encompassing governance, skills development, culture change, infrastructure upgrades and cybersecurity investments. With diligent efforts to promote responsible and ethical AI adoption while managing associated risks, higher education institutions can fully utilize artificial intelligence to transform record management practices and unlock new heights of efficiency, insights and student experiences in the future. Although further research is required, AI technologies exhibit immense capacity to transform records management in higher education through improved governance of information flows.

### Bibliography:

1. Clay, J. (2018, June 20). Guide to the intelligent campus. *Intelligent Campus*. <https://intelligentcampus.jiscinvolve.org/wp/2018/06/20/guide-to-the-intelligent-campus/>
2. Ellucian. (2023). *Ethos Open Software | Ellucian*. <https://www.ellucian.com/solutions/ellucian-ethos>
3. EU. (2019, April 8). *Ethics guidelines for trustworthy AI | Shaping Europe's digital future*. <https://digital-strategy.ec.europa.eu/en/library/ethics-guidelines-trustworthy-ai>
4. Fayaz Ahmad, S., Alam, M., Rahmat, M., Mubarik, M., & Hyder, S. (2022). Academic and Administrative Role of Artificial Intelligence in Education. *Sustainability*, 14, 1101. <https://doi.org/10.3390/su14031101>
5. Green, E., Singh, D., Chia, R., & Actis, A. (2022). *Ai ethics and Higher Education Good Practice and Guidance for Educators, Learners, and Institutions Education Ethics* (p.270). [https://www.globethics.net/documents/10131/26882157/GE\\_EE\\_10\\_isbn9782889314423.pdf](https://www.globethics.net/documents/10131/26882157/GE_EE_10_isbn9782889314423.pdf)
6. Horizon. (2022, April 18). *2022 EDUCAUSE Horizon Report | Teaching and Learning Edition*. EDUCAUSE Library. <https://library.educause.edu/resources/2022/4/2022-educause-horizon-report-teaching-and-learning-edition>
7. ISO. (2016, April 26). *ISO 15489-1:2016*. ISO. <https://www.iso.org/standard/62542.html>

8. Jisc. (2022, December 5). *An introduction to chatbots*. Jisc. <https://beta.jisc.ac.uk/guides/an-introduction-to-chatbots>
9. Kelley Connect. (2020, February 27). *AI and the Impact It Has on Document Management in Education*. Kelley Connect. <https://kelleyconnect.com/artificial-intelligence-and-the-impact-it-is-having-on-document-management-in-education/>
10. Khan, N., & Al-Yasiri, A. (2016). Framework for Cloud Computing Adoption: A Roadmap for Smes to Cloud Migration. *International Journal on Cloud Computing: Services and Architecture*, 5(5/6), 01–15. <https://doi.org/10.5121/ijccsa.2015.5601>
11. Klutka, J., Ackerly, N., & Magda, A. J. (n.d.). *ARTIFICIAL INTELLIGENCE IN HIGHER EDUCATION Current Uses and Future Applications*. Wiley. <https://universitieservices.wiley.com/wp-content/uploads/2020/12/201811-AI-in-Higher-Education-TLH-with-new-bage.pdf>
12. Mashilo Thomas, M. (2021). *Utilising artificial intelligence technology for the management of records at the Council for Scientific and Industrial Research in South Africa* [Thesis]. <https://uir.unisa.ac.za/handle/10500/28800>
13. Mashilo Thomas, M. (2022). Artificial intelligence for the improvement of records management activities at the Council for Scientific and Industrial Research. *Journal of the South African Society of Archivists*, 55, 16–26. <https://doi.org/10.4314/jsasa.v55i.2>
14. MIT Libraries. (n.d.). *From The Libraries: Digital Initiatives*. Retrieved November 10, 2023, from <https://web.mit.edu/fnl/vol/134/seidman.htm>
15. OECD. (2019). *OECD Legal Instruments*. <https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0449>
16. Parycek, P., Schmid, V., & Novak, A. (2023). *Artificial Intelligence (AI) and Automation in Administrative Procedures: Potentials, Limitations, and Framework Conditions | Journal of the Knowledge Economy*. <https://doi.org/10.1007/s13132-023-01433-3>
17. Popenici, S. A. D., & Kerr, S. (2017). Exploring the impact of artificial intelligence on teaching and learning in higher education. *Research and Practice in Technology Enhanced Learning*, 12(1), 22. <https://doi.org/10.1186/s41039-017-0062-8>
18. Reitz, J. M. (2014). *ODLIS*. Online Dictionary for Library and Information Science. [https://odlis.abc-clio.com/odlis\\_a.html](https://odlis.abc-clio.com/odlis_a.html)
19. Rolan, G., Humphries, G., Jeffrey, L., Samaras, E., Antsouпова, T., & Stuart, K. (2019). More human than human? Artificial intelligence in the archive. *Archives and Manuscripts*, 47(2), 179–203. <https://doi.org/10.1080/01576895.2018.1502088>
20. Tabassi, E. (2023). *Artificial Intelligence Risk Management Framework (AI RMF 1.0)* (error: 100-1; p. error: 100-1). National Institute of Standards and Technology (U.S.). <https://doi.org/10.6028/NIST.AI.100-1>
21. UC Presidential Working Group on AI. (2021). *Recommendations to Guide the University of California's Artificial Intelligence Strategy*. University of California. <https://www.ucop.edu/ethics-compliance-audit-services/compliance/presidential-working-group-on-artificial-intelligence.html>
22. Webb, M., Attewell, S., Moule, T., Nicholson, H., & Fraz, A. (2021, April 26). *Artificial intelligence (AI) in tertiary education—jisc*. Jisc. <https://beta.jisc.ac.uk/reports/artificial-intelligence-in-tertiary-education>
23. Alasmari, J. S. . (2023). The Dynamics of Verbal and Non-Verbal Linguistic Communication in The Saudi Sports Community. *Arts for Linguistic & Literary Studies*, 5(4), 539–569. <https://doi.org/10.53286/arts.v5i4.1676>
24. Omer, N. I. M. (2024). Maintaining Meaningful Human Interaction in AI-Enhanced Language Learning Environments: A Systematic Review . *Arts for Linguistic & Literary Studies*, 6(3), 533–552. <https://doi.org/10.53286/arts.v6i3.2083>

25. Al-Ghobesi, A. A. H. (2025). Risks of Relying on Artificial Intelligence in Learning Arabic Language Sciences Through the Meta Application. *Arts for Linguistic & Literary Studies*, 7(1), 396–419. <https://doi.org/10.53286/arts.v7i1.2420>
26. Ahmed, M. R. A. (2025). Accreditation and Quality Assurance: Exploring Impact and Assessing Institutional Change in the US and Saudi Arabian Higher Education Institutions. *Arts for Linguistic & Literary Studies*, 7(1), 626–639. <https://doi.org/10.53286/arts.v7i1.2419>