

APPLICATION OF GENERATIVE ARTIFICIAL INTELLIGENCE (GAI) AND ARTIFICIAL INTELLIGENCE (AI) IN HIGHER EDUCATION (HE)

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Abstract

This research provides a brief overview of GAI and AI applications in major parts of the world. After this, it will try to demystify GAI and AI literacy. Finally, it will discuss how the American University of Nigeria (AUN) and Africa will benefit from these fantastic tools to improve and perhaps lead HE. AUN has a great opportunity to become one of the world's leading universities in this area.

Introduction

What is GAI and AI

Various scholars seem to offer different definitions of GAI and AI, but they are very similar. One could say the same description phrased differently. Among many, Martínez-Camacho et al. (2025) and Buitrago-Ciro et al. (2025) nicely summarize various descriptions of GAI and AI. Basically, a machine or software with the ability to imitate human intelligence by generating texts, photos, videos, answering questions, and more. Some scholars differ between GAI and AI, but for the purpose of this conference, it is a small detail, because both are advancing. Among those available, GAI and AI tools often mention ChatGPT, Copilot, Gemini, and a few others. These tools have extensive capacity to help with all levels of education, entertainment, social interactions, and even blackmailing people and institutions. Like many tools, they can be used for both positive and negative purposes. Human history is full of elements that can be used for good or bad. For example, the discussions on gun ownership in America, people have radically different opinions.

Thanks to the International Federation of Library Associations and Institutions (IFLA) latest issue of October 2025, we have very up-to-date data on global applications of GAI and AI in HE.

Buitrago-Ciro et al. (2025) surveyed 40 academic libraries in North America (Canada + USA), Latin America (excluding Brazil), Sub-Saharan Africa, and Europe to evaluate the application of GAI and AI. These institutions were selected from the 10 highest-ranked institutions in their respective regions, according to the Times Higher Education 2023 rankings. (with some discrimination to avoid “over representation”) Here is the result.

	AI integration by Region among the 10 top-ranking libraries	Availability of Library AI Statements by Region
Sub-Saharan Africa	1	0
Canada + USA	3	2

Europe	2	2
Latin America and the Caribbean (Excluding Brazil)	1	0

In addition, there have been country- and region-specific studies on the application of AI in South Africa, China, Latin America, and the United Kingdom (UK). In South Africa, public academic libraries lacked an obvious strategy for AI despite the availability of infrastructure for some of them (Molaudzi, A. I., & Ngulube, P., 2025).

A study conducted on top Latin American University Libraries, which cover the whole of Latin America, unlike earlier studies. The researcher based their selection criteria on "... 2025 QS World University Rankings for Latin America, with one university chosen from each country within this group [total six countries]. Three recognized information service providers were also included in the study. The inclusion of EBSCO, Clarivate, and Elsevier is justified by their central role in providing advanced information and technology services to university libraries." (Martínez-Camacho et al., 2025, p. 649). This study indicates that all of these top-ranking regional universities and service providers are still in the process of applying AI. In other words, they have not done so completely yet.

China

In China, despite technological advancements, GAI and AI have not yet been widely applied in higher education, according to a 2024 study. Pang. (2024). Perhaps we cannot talk about Chinese universities with the same certainty as the earlier-mentioned studies.

United Kingdom (UK)

Professor Wilson has done an excellent study at the top 24 UK Universities (Russel Group). These 24 universities have jointly issued a statement on the use of GAI in 2023. Besides these universities, only a few universities in the UK have written policies. Wilson (2025). According to the International Association of Universities (2025), there are 245 accredited HE institutions in the UK. A slightly higher proportion—10% — of university libraries have a declared policy, mostly at the best universities in the country.

Demystification of GAI and AI

As General Manager of Barzani National Memorial (BNM), I conduct ongoing research and collection development on Barzani and Kurdistan. Despite 10 years of professional research on this subject, I have, for the first time, come across a book published in 1992 that is actually dedicated to Mustafa Barzani. Because of the original cataloguer's bias, the book wouldn't be in various catalogs in American University Libraries, Public Libraries, or even in OCLC or even in Amazon under Barzani or Kurdistan; no one could find it. Thanks to AI, I found this important

book for my library. It actually helped me to discover something very important about Information Literacy, GAI, and/or IA literacy.

The author of this book, William Safire, is a reporter, publicist, former White House speechwriter, historian, novelist, lexicographer, essayist, Pulitzer Prize winner, and recipient of the American Presidential Freedom Medal. The title of the book is “. The First Dissident: The Book of Job in Today's Politics. The book of Job is very popular and well known across the Abrahamic religions, including the Old and New Testaments and the Quran. In the Quran, Job is known as Prophet Ayub.

What gets my attention is the following statement in relation to the Book of Job:

“The fact that it was written approximately twenty-five hundred years ago suggests that the complexity of the human mind has not increased much in the five millennia since the early Sumerians invented writing. If proof is needed that understanding has been plodding along while knowledge has exploded, the Book of Job stands as that proof.” (Safire, 1992)

After studying this book from the perspective of all three Abrahamic religions, I decided to refresh my memory about the Greek and Roman philosophy and ethics. I read carefully Marcus Aurelius' book of Meditations and Lucius Annaeus Seneca's book called “Moral Letters to Lucilius.” These pre-Christian writings extensively discuss righteousness, integrity, morality, honesty, respect, ethics, with many references to the classical Greek philosophers like Socrates, Plato, Aristoteles, and more.

What does this have to do with our subject? In fact, many of the things we are teaching about information literacy —or, with new jargon, GAI and AI literacy —are based on similar values. Here are three major examples from the leading institutions:

McGill Library Guides Artificial Intelligence AI Literacy (Canada)	Living guidelines on the responsible use of generative AI in research, European Commission Directorate-General for Research and Innovation, Apr. 2025	The UK’s Russell Group (2023) of 24 research universities collaboratively issued a statement of principles, including:
1 Reliability 2 Objective 3 Bias 4 Ownership	1 Reliability 2 Honesty 3 Respect for colleagues	1. Supporting students and staff to become AI-literate; 2. Equipping staff to support appropriate student use;

5 Type (Which subtype of AI is it?)	4 Accountability	3. Adapting teaching and assessment to incorporate ethical AI use 4. Ensuring academic rigor and integrity 5. Working collaboratively to share best practices.
Retrieved 23 Oct 2025 from https://libraryguides.mcgill.ca/ai/literacy	European Commission. (2025, April).	Wilson, T. D. (2025). The development of policies on generative artificial intelligence in UK universities. <i>IFLA Journal</i> , 51(3), 723–736. https://doi.org/10.1177/03400352251342506

It will probably be helpful to incorporate some traditional values into the teaching of GAI and AI literacy to demystify them. As Safire stated, “... the complexity of the human mind has not increased ...” with technological expansion. Humans still mostly operate based on those historical values. It is important to make the language easier for students to understand.

Another major institution that shapes academic libraries' guidelines is the American Library Association's College and Research Libraries section. “AI Competencies for Academic Library Workers” was approved in October 2025.

It points out a very important element, “... In developing these competencies, the committee recognized significant parallels between responsible AI use and the principles of critical information literacy, ...” (Association of College and Research Libraries, 2025). In short, there are new additions to information literacy, but no radical differences.

How could the AUN and Africa benefit from these new technologies?

As the study shows, the application of GAI and AI is still very new, and very few top universities have applied these new technologies. This creates a great opportunity for the AUN to claim its leadership as soon as possible. Despite being a new institution, it has several strong areas of expertise as a leading university. This transformation will not be very different from the AUN transformation from print to the electronic environment. Most researchers have focused on GAI and AI policy statements, guidelines, and literacy. There are many other universities that have GAI and AI literacy programs and policy statements. For example, the University of British Columbia

Library. (2025) [Canada] Generative AI and ChatGPT, and the Florida International University Library have excellent policy and literacy programs on their website.

How could it be done?

- 1 Support of University Leadership: Board of Trustees, Governing Council and administration
- 2 Adaptation of policy for the use of GAI and AI (There are many example available)
- 3 Adaptation of the GAI and AI Literacy Guidelines
- 4 Make GAI and AI training obligatory across the university
(May a general class be created for all first-year students?)
- 5 Train trainer based on the Literacy guidelines.
- 6 Create an active outreach through various AUN media, national, and international Media
- 7 Maintain a high motivation for training throughout the year.
- 8 Keep accountability via statistics, data about the training, and progress

This policy will enhance the educational capacity of the AUN faculty, students, and the community at large. I will attract a better quality of faculty and students. In addition, it will bring prestige and free publicity for the University.

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