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Exploring the philosophy and practice of AI literacy in higher education in the Global South: a scoping review

Research – Full text

Brenda van Wyk
University of Pretoria, South Africa
Brenda.vanwyk@up.ac.za
ORCID: 0000-0003-3898-7042

Abstract

Artificial Intelligence (AI) is at the top of the agendas of higher education and education leaders are required to give direction in educating the next generation of students and citizens. AI holds positive answers to technological innovations, but the potential for continued inequities, exclusion and divides must not be ignored. As a relatively new concept, AI literacy is often viewed as a complex concept requiring more detailed conceptualisation. Furthermore, with the recent hype around generative AI (GenAI), discussions and explorations around what AI literacy is, are now being deliberated. Historically AI was the domain of mathematicians and computer scientists. This is changing as the wider implication of AI permeates all aspects of society, in particular the ethical and informed use of AI and GenAI is paramount. This leaves higher education with the dilemma of deciding who is responsible in teaching and facilitation AI literacy. Keeping in mind that there is an abundance of new literacies in academia. This problem is particularly pronounced in the Global South countries, where digital exclusions and social injustice are becoming more complex. This scoping review evaluated 40 screened and eligible peer reviewed articles and conference proceedings published between 2020- 2024 on AI literacy in higher education in the Global South. The aim of the study was to gauge the extant research on AI literacy and its subsequent ethical implications in higher education in the Global South. The study further explored which philosophies and frameworks inform and guide AI literacy research and support in higher education within the selected region. Findings are that while the disciplines of education are engaging in research, other disciplines such as

Information Science are interdisciplinary actors in teaching and facilitating AI literacy, but that there is a pronounced paucity in research being conducted.

Keywords

AI, AI support, AI education, AI Ethics

Introduction

Artificial Intelligence (AI) is at the top of the agendas of Higher education and education leaders are required to give direction in educating the next generation of students and citizens. AI is increasingly becoming a transformative force in higher education, but it also holds the potential for continued inequities, exclusion and divides. Furthermore, with the recent hype around generative AI (GenAI), discussions and explorations around what AI literacy is, are now being deliberated. Because of its wider implication, computer sciences and mathematics cannot be the only disciplines considering the ethical and informed use of AI and GenAI. This leaves higher education with the dilemma of deciding who is responsible in teaching and facilitation AI literacy in context, keeping in mind that there is a range of new literacies in abundance in academia. Teaching AI literacy in higher education has recently been highlighted, as it impacts various aspects of teaching, learning, administration, and research. In particular it poses questions on how best to support students to build and developed the composite competence and fluencies. As with academic literacy and information literacy, there are many role players and many different approaches with higher education. A greater concern is not who is responsible, but that it may not be addressed at all, or monopolised by disciplines who feels that they are better positioned for the task.

To get a more informed starting point to explore this scenario this study firstly looks at what philosophical paradigms underpin teaching AI literacy and which approaches are used in facilitating and teaching yet another literacy. A particular focus in addressing subsequent s of this study is to gauge and evaluate recent research conducted in or about underdeveloped and developing communities and countries who may still be excluded on many fronts . For the purpose of this study , the United Nations Trade and Development (UNCTAD) description of the Global South is Africa will be adopted as being , Latin America and the Caribbean, Asia excluding Israel, Japan, and South Korea, and Oceania excluding Australia and New Zealand.

DOI: 10.70000/cj.2024.73.601

Background and a brief history of AI

Although we may think of AI as a new phenomenon, its early developments go back nearly 60 decades. The now famous Dartmouth seminal workshop held in 1956 by an interdisciplinary team of scientists in the USA, was where the concept of artificial intelligence was first coined (McCarthy, 2007, Sartori & Theodorou, 2021). The early origins on AI can be traced to the debate that ensued around the question: can computers be held responsible for their own acts, like humans are held responsible? In 1948 Norbert Wiener offered one of the first influential models in information ethics. It addressed issues such as control, communication, and the responsibilities associated with the use of information in automated systems. What seemed like science fiction in 1950 is now our lived experience with the development of LLMs used in GenAI tools and applications such as ChatGPT. It has permeated every aspect of teaching and learning, as well as library and information support services.

AI and the philosophies underpinning AI literacy and ethics

Moral tenets and theories of ethics pertaining to all the aspects of AI can be complex (Ng et al, 2021). The origins of the ideas and foundations of information ethics (IE) can be traced back to the early writings of mathematicians such as Shannon, Wiener and McCarthy. The study of AI ethics is considered as part of applied ethics, and on a broader level, it is a branch of the philosophy of information. As a process of mind, teaching underpinning the philosophies of a discipline should be at the heart of a curriculum.

The Philosophy of Information (PI) encompasses aspects of Philosophy, Computer Science, Information Science, Cognitive Science, and Communication Studies. Floridi (2015) defines the philosophy of information as a field of philosophy specifically looking at critical research into the conceptual nature of information and its basic principles. As an interdisciplinary field, it explores the nature, properties, and implications of information. This field includes the dynamics of information, its uses and applications theory and computational methodologies (Floridi, 2013; Floridi, 2015).

Ethics, as a branch of philosophy, refers to the systematising, defending, and recommending concepts of right and wrong conduct, where rights, obligations, benefits, and fairness principles are explained and deliberated in models and frameworks. Information Ethics (IE) in turn, is a branch of the PI. New developments, such as AI and GenAI, have a profound impact on moral decision-making in our daily lives. The academic disciplines of Information Science, as well as Informatics, have been addressing the ethics of information. Han (2022)

DOI: 10.70000/cj.2024.73.601

reports that the oldest ethics and the ethical use of information in a digital environment are computer and information ethics, which in turn paved the way for new forms of ethics and new dimensions in applied ethics.

AI literacy impacts not only teaching and learning in computer science. It is ubiquitous, and for the foreseeable future, values and norms remain humanistic and not yet exclusive technological constructs. All students must be exposed to is AI literacy to gain the knowledge and understanding necessary to effectively interact with AI tools in their studies and in society. Making ethical choices is now more crucial than ever.

Literature review

AI is increasingly becoming a transformative force in higher education, impacting various aspects of teaching, learning, administration, and research.

Information literacy and AI literacy

From the onset it is clear that the concept of AI literacy does not have a shared understanding. It is generally accepted that literacy refers to specific ways of thinking about and performing reading and writing in order to comprehend or express ideas or thoughts in writing within a particular context of use (Chui et al, 2024). Currently there is no unified and agreed definition of AI literacy, and Ng et al (2021) subscribe this to the fact that AI literacy is an emerging field.

Chui et al (2024) refer to Long and Magerko's definition of AI literacy as a set of competencies that enables individuals to critically evaluate AI technologies, communicate and collaborate effectively with AI, and use AI as a tool online, at home, and in the workplace. In some disciplines it is merely seen as an extension of exiting literacies such as computer literacy, digital literacy and information literacy. In other cases, the concept is unpacked on deeper levels, looking at intricate and elaborate frameworks to explain and argue around literacies for basic and advanced AI.

As the general understanding of AI literacy revolves around the knowledge and understanding necessary to effectively interact with, use, and critically evaluate artificial intelligence (AI) technologies. It encompasses a range of skills and competencies, ranging from a basic understanding of AI concepts, applying it in critical thinking and problem solving to ethically using it in daily communications. Ng et al. (2021) caution that attempts to define AI literacy is based on lending from existing fields and definitions such as digital and computer literacy. Yet, practical and public understandings of AI technologies must inform how AI literacy is defined and this remains under-explored and under-researched.

DOI: 10.70000/cj.2024.73.601

AI in Academic libraries

To ascertain information specialists familiarity with AI in general, one should look at AI usage in academic LIS. Academic libraries are uniquely positioned to advance AI literacy within their institutions and beyond. They serve a diverse community of students, faculty, and researchers who can greatly benefit from enhanced understanding and skills in AI.

By implementing these strategies, academic libraries can significantly contribute to the AI literacy of their academic communities, preparing students and researchers to engage with AI technologies critically and responsibly.

AI and AI literacy in Higher education

AI is increasingly becoming a transformative force in higher education, impacting various aspects of teaching, learning, administration, and research. Here are some key areas where AI is making a significant impact. By leveraging AI, higher education institutions can enhance the quality of education, improve administrative efficiency, and provide better support to students and faculty. However, it is also important to address the ethical considerations and potential biases associated with AI to ensure that its implementation is fair and equitable.

Kong, Cheung and Zhang (2023) share that there is agreement and an awareness that AI literacy must be included in higher education programmes and curricula, but that there is uncertainty on how it must be done. There is general unease into the role that LIS plays in fostering AI literacy. There is a general concern about the skills of lecturers and information specialists.

Research design

The purpose of this review is to gauge the coverage of recent peer-reviewed articles and conference proceedings to get a clear indication of the disciplines and their respective focuses on the philosophy and practice of AI literacy in higher education in the global south. For this purpose, the review considers interdisciplinary studies conducted between 2020 and 2024. This study employs a scoping review for evidenced knowledge synthesis of articles with a strong philosophical underpinning.

The Search strategy

To answer the research question of what the current status quo of reported research is in or about the Global South with regards to AI literacy in higher education, a scoping review guided by the PRISMA Extension for Scoping Reviews were conducted. The flow chart in Figure 1 explains the knowledge synthesis of sources. Peer-reviewed articles and conference proceedings in English,

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published between 2020 and 2024 were selected. Based on the recent escalation AI and GenAI developments (as reported by Floridi, 2019 and others) the study is limited to the past four years.

Peer-reviewed articles in English, published between 2020 and 2024 published in or about the Global South. Answering to the following criteria:

- The context of the articles and documents looks at higher education in the global south;
- The discussion includes teaching and information philosophy and literacies;
- The content addresses AI literacy in teaching and in academic libraries.

The search strategy covers philosophy, ethics, information science, business studies and computer science data bases. The databases included in the search strategy in this study are Google Scholar, Scopus and Web of Science.

Websites were searched using the local search functionality and a combination of the following keywords: " AI AND Philosophy; "Artificial Intelligence OR AI AND Literacy"; " Artificial intelligence OR AI AND Higer Education"; "Information ethics AND AI literacy OR Artificial Intelligence Literacy", and "Ethics AND artificial intelligence" as systematically as possible within the search functionality and capabilities of each website. These results were screened and refined for studies that took place between 2020- 2024 in or about the Global South.

Databases were queried during June 2024. Databases were searched using keywords and search strings representing the three main concepts of AI in higher education, AI technology and AI ethics. These results were then filtered according to document type and then further refined to look for aspects such as philosophy of information and ethics, social justice and exclusion issues, LIS adoption of AI and the information society. A data log of the search strategies and results with links are archived in an Excel spreadsheet.

Inclusion and Exclusion criteria

The scoping review includes sources that are published in peer review articles and conference proceedings. Covered from 2020-2024. It excludes grey literature, and abstract- only- publications. It further excludes articles that does not address AI in higher education falling outside of the Global South countries. Articles about education, but not higher education were excluded.

The selection of evidenced sources

The aim of this study is to consider peer-reviewed articles on the Global South or about the Global South related to AI literacy in higher education. The search

DOI: 10.70000/cj.2024.73.601

strategy covers philosophy, ethics, information science, education, sociolinguistics and computer science data bases. The databases included in the search strategy in this study are Google Scholar, Scopus and Web of Science. Databases were queried during July 2024. Databases were searched using keywords and search strings representing the two main concepts of AI technology and AI ethics.

These results were then filtered according to document type and then further refined to look for aspects such as literacy frameworks, applied philosophy of ethics, intergovernmental initiatives, inclusivity and digital exclusion. A data log of the search strategies and results with links are archived in an Excel spreadsheet.

Guided by the PRISMA Extension for Scoping Reviews (Tricco et al. 2018), the flow chart in Figure 1 explains the knowledge synthesis of sources. From the three databases the initial search delivered 98 100 results. When the search was refined Web of Science had 278 results, Google scholar 3670, and Scopus 65. After duplicates were removed, and filtering was done there was a total of 275 articles selected.

Discussion of findings and knowledge synthesis of results

The goal of this studies knowledge synthesis was to provide an overview of research on AI literacy in higher education in the Global South between 2020 and 2024. The rationale is to gauge the issues and complexities of this topic, and to see how this fits in to a wider range of literacies and literacy actors in higher education.

DOI: 10.70000/cj.2024.73.601

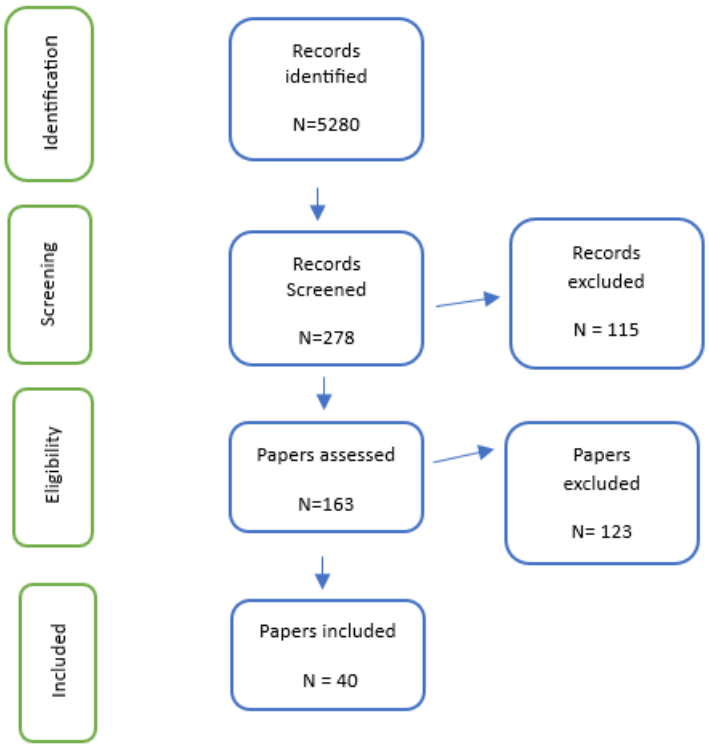

Figure 1. Flow Diagram of review process for this study

Evaluating the selected sources and analysing them thematically, nine subtopics can be identified.

Table 1: Evidenced Sources included

Years	Types of research	Global South Country/continent	Coverage	Reference
2020 -2022	Systematic literature reviews Literature reviews Typology research Normative reflection	Africa Broader Global South Area	A. Philosophy, Paradigms and Ethics	A.1Van Norren (2022); A.2 Morley et al. (2020); A.3 Heiliner, (2022); A.4.Lauer, (2021); A.5 Hickok, (2021); A.6 Kazim & Koshiyama (2021)
2020-2023	Systematic literature reviews	Broader Global South India	B. Governance, Strategy,	B.1 Kak (2020); B.2 Monasterion et al (2022);

DOI: 10.70000/cj.2024.73.601

	Ethnographic research Qualitative	Africa	Policy, Funding	B.3 Kumar & Sangwan, (2024); B.4 Goosen & Mugumo (2024); B.5 Tanveer et al. (2020)
2021 - 2023	Literature review Co-design research Desk research Mixed method	China Africa Brazil Philippines Broader Global South Area Ghana Nigeria	C. Education praxis	C.1 Chui et al. (2024); C.2 Gow et al (2023); C.3 Ng et al (2021; C.4 Corrigan et al. (2023); C.5 Ng et al. (2023); C.6 Su & Yang (2023); C.7 Kong, Cheung & Zhang (2023); C.8 Holmes et al. (2022; C. 9 Chisom et al. (2023); C.10 Goffi (2023); C.11. Afoladi, (2023); C.12 C.10 Mabona, Van Greunen & Kevin (2024).
2021-2023	Systematic literature review	Korea China Africa South Africa Broader Global South area	D. AI literacy, digital literacy, algorithm literacy, information literacy	D.1 Benton (2023); D. 2 Gow (2023); D.3 Moyo & Ndlovu (2021); D.4 Černý 2024; D.5 Ng et al (2021); D.6 Sartori & Theodorou, (2022); D.7 Green, 2021.
2020-2023	Literature review	South Africa	E. Digital exclusion, social justice,	E.1 Kak, A (2020) E.2 Roche, Wall & Lewis, (2023); E.3

DOI: 10.70000/cj.2024.73.601

	Narrative inquiry		AI justice, technological extractivism	Hoffmann (2021); E.4 Raffaghelli (2022)
2023	Bibliometric analysis	Broader Global South Area China South Africa China Kenya Indonesia, Malaysia, Thailand Singapore	F. LIS and AI literacy support services	F.1_Bozkurt (2023); F.2 Chan (2023); F.3 Stahl & Eke (2023); F.4 Huang et al, (2024) F.5 Adarkwah (2024); F.6.Palhadi (2024), F.7 Akakpo (2023); F.8 Okunlaya (2024); F.9 Tiernan et al (2023).

Discussion of findings

Forty studies were selected from the eligible sources screened. The types of research studies within the final results included desk studies, narrative inquiries, case studies, bibliometric studies, qualitative, mixed methods and co-design methodologies. China is the area where most of the research originate. Library and information services has a negligible number of research studies on the topic, and those that were identified centres around the reasons and challenges why AI literacy facilitation is not yet in place. Topics that invariably are most often also discussed are ethics and widening inequalities. There has been a sharp increase in the number published studies on the topic of AI ethics in the Scopus database from 2021 to date.

Representative countries

The results of this review indicated that most studies that met the criteria for inclusion were conducted in countries within or about the Global South. These include Africa, Latin America and the Caribbean, Asia, Japan, and South Korea, and Oceania There is a notable paucity in reported research emanating from Africa among others from the Global South countries.

General findings

Authors and research allude to the notable challenges of AI technologies related to AI literacy. Many authors relate AI literacy to other literacy such as digital, data,

DOI: 10.70000/cj.2024.73.601

and computational literacy. Kumar and Sangwan (2024) found that AI and AI literacy has tangents and extensive implications across disciplines such as education, healthcare, and media.

The sources evaluated specifically mentions aspects of governance, exclusion, Western dominance in philosophies underpinning AI literacies, research and frameworks. At this stage education praxis and AI integration with these curricula are foremost topics among the research evaluated.

A. Philosophy, paradigms and frameworks in researching AI Literacy

Many of the selected studies do not mention or elaborate on a particular paradigm or framework that informed their research. Goffi (2023) laments that ethics applied to Artificial Intelligence (AI) is still dominated by Western perspective focusing on continental philosophy. In their study, Roche et al (2021) profess an intersectional analytical framework to address the inherent complexities of AI ethics, and state that it is possible to understand how aspects of social and political identities combine to create different modes of discrimination and privilege. Van Norren (2022) looks at the African concept of Ubuntu ethics in relation to AI ethics. She shares that the UNESCO World COMEST formulated principles as input, which are analysed from the African ontological point of view. Here the COMEST principles changes from looking at individual rights to a more universal approach of what is good and how this relates to the broader society, emphasising the need to take responsibility in practical use of AI for society as a whole.

Benton (2023) calls for AI literacy to be regarded as a basic good in a liberal constitutional democracy in order for citizens to be able to exercise their freedom and equality. It should underpin future AI studies in Africa, and he (Benton, 2023) advocates for including ethics education into AI courses and training programs across African universities. Students, educators, and AI developers with the knowledge and skills to identify, analyze, and address ethical dilemmas associated with AI technologies. Benton also calls for clear policies and regulatory frameworks. These policies should outline guidelines for data management, algorithmic transparency, and ethical review processes. Afolabi (2024) links to this and state the need for a framework that will serve as a guide for the ethical use of AI in Education. In so doing the potential of AI and AI literacy in higher education can be optimised in line with ethical values. Authors mostly point to the need for guidance in using AI in research, instruction and curriculum development. Collaboration can help uphold ethical principles All studies allude to the need for skills and competencies in using AI responsibly. There is an overall call for capacity development in higher education to ensure optimal application

DOI: 10.70000/cj.2024.73.601

of AI, which in turn can enhance learning outcomes and student success (Goosen & Mugumo, 2024)

B. Governance, policy, funding

As early as 1980 the OECD's Privacy Guidelines outlined principles for the protection of privacy and personal data. Yet, today authors are critical and questions the intentions and contribution of intergovernmental organisations and their initiatives (Roche et al, 2021; Green, 2021; Floridi, 2018; Wright, 2023). Monasterio et al (2022) laments that the lack of government capacity in the Global South causes an imbalance due to in the absence of an ethical reflection. This leads to increased exclusion of marginalised communities. They continue by sharing that there is an over-reliance on in and a dependence on the Global North on technological innovations, as well as regulations.

Intergovernmental organisations, such as the OECD, UN and UNESCO offer valuable insights and guardrail on dimensions of AI ethics such as the inclusivity, education, awareness, towards further cooperation among countries and regions. In this review research (including Roche et al., 2022) report on the continuous efforts to address AI ethics risks, more particularly on social and cultural levels, resulting an ever-growing body of new knowledge that must translate into AI policies, frameworks and guidelines.

Many authors argue that even if educational leaders from the Global South were aware of how to implement AI literacy teaching and support, but that they would not have the financial resources to prepare schools for such a challenged way.

C. Education praxis

Educational praxis is covered extensively in research on AI and AI literacy in higher education. The centrality is pedagogical approaches in teaching and learning, and curriculum development across disciplines taught at universities. In terms of student support and educational governance. The study by Goosen and Mugumo (2024) looks at different dimensions of AI ethics and addressing AI literacy, and is one of the few studies that also look at student support in AI literacy development. Consequences of unethical and irresponsible behaviour leading to privacy and security breaches are addressed. Measures to ensure that AI technologies are used responsibly and ethically are addressed (Goosen & Mugumo, 2024; Su & Yang, 2023; Ng et al, 2021). Operationally, matters concerning infrastructure and training aim to provide resources and support for effective AI implementation (Chatterjee & Bhattacharjee, 2021).

DOI: 10.70000/cj.2024.73.601

D. AI literacy, digital literacy, algorithm literacy, information literacy

Studies in this review are all concerned about the social implications of AI (Kak, 2020; Gill & Germanns, 2022, Goffi, 2023). This leaves marginalised communities in the Global South open to exploitation, and concerns are that it is currently exacerbating exclusion. Kak (2020) says this trend resembles colonial tendencies leading to continued inequities. Gill and Germanns (2022) say this scenario add to the lack of access and agency due to the continued digital divide, and disallowing a new generation to participate and contribute to much needed transformation. Gill and Germanns (2022) refer to 'a youth bulge' experienced in developing countries where the total population of younger people is proportionally much higher than the rest of the age groups. Educating and adequately skilling this grouping will ensure social inclusion, and employment coupled with opportunities for skills development.

E. Social justice , digital exclusion, AI justice, technological extractivism

The majority of articles touch on or mention social injustice issues in higher education pertaining to AI and AI literacy. These include digital exclusion, and Western domination of philosophy and agency as part of their research. One of the key issues in debates around artificial intelligence (AI) and education is that AI application could exacerbate inequities already prevalent in the Global South. In addition to the biases that AI possesses by design, systematic errors can discriminate by race, gender, sexual orientation. Political and physical conditions are mentioned, both by data infrastructure and by algorithms.

Benton (2023) argues that AI literacy should be added to the list of primary goods in Justice Theory developed by political philosopher, John Rawls. John Rawls was known for his theories on social justice. He described primary goods as those necessary resources that all citizens need to exercise their two moral powers, namely their sense of justice and their sense of the good. Both Goffi (2023) and Benton (2023) strongly advocates that the lack of AI literacy impacts citizens' ability to exercise their sense of justice and their sense of the good. Monasterio et al (2022) posit that technological extractivism is a worrying factor in the Global South. Extractivism refers to colonial practices that have existed over the last several hundred years with the goal of wealth and resource accumulation, regardless of the oppressions that geographically separate taker and giver. Digital extractivism is a form of extraction that's made possible by digitisation and driven by capitalist drives and motives originating in the West or Global North.

GenAI has the capacity to empower students who have already reached their information literacy thresholds, while at the same time disconnecting from

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society those who for various reasons have not been able to overcome their digital divides. Generative AI produces disparities between language regions. Since it is an English-centric technology, the same kind of quality of such technologies is not available to learners who use other languages. Also, their models are trained by data that by and large is in English. Language discrimination and disparities result in lower-quality responses where non-English languages are spoken, and English-speaking countries have an advantage.

F. LIS and AI literacy support

In terms of AI in LIS in the Global South the review could only identify a handful of articles. More articles were found on AI in LIS management processes, but there is a significant dearth of research in terms of AI literacy support in higher education. In a Malaysian study Okunlaya, Abdullah and Alias (2022) report that not many studies are conducted on the use of AI in libraries for user and information services. This study revealed that this is also true for the rest of the Global South, where a low adoption rate of AI innovation in user services is observed. It will also encourage library and information professionals to adopt AI to complement effective service delivery. There is a need for further research into strategies, capacity development and innovation to be able to render new and innovative information support services in a changed and changing world. This is also confirmed by Akakpo (2023), where it is highlighted, that academic libraries must fulfil their mandate to prepare and support students in their studies and innovate after university. Information is more easily accessible through digital channels and is increasingly abundant. In addition, GenAI compounds the new reality and digitally driven information literacy skills is more important than ever.

Academic libraries are called to action with regards to AI and specifically facilitation AI literacy inclusion in information services to students. AI literacy must become part of information literacy programmes, guidelines must be generated for academics for the ethical use of AI in teaching and learning. The upskilling of information specialist would have to address AI toll usage. AI tools like ChatGPT, WriteSonic, BardAI, and DALL-E must become familiar to information specialists. Guidelines must be offered and these should not curtail the use of AI tools, but rather encourage and direct the ethical use thereof. An integrated and collaborative the goal within the actors in higher education must centre around adequate student develop of skills, competencies and fluencies that will be required for the future of work. Researchers are in one mind about the application and guidance of AI tools – it should not be prevented or discourage, rather the ethical use should be advocated.

DOI: 10.70000/cj.2024.73.601

Conclusion

The forty studies selected and evaluated covered a range of empirical research findings on AI literacy in higher education in the Global South. The selected sources mainly considered how AI literacy is handled, but also looked at the philosophy and practice of AI literacy in higher education in the Global South. The prevailing notion is that even UNESCO's work involving the needs of the Global South is founded in Western principles and philosophies. It excludes dimensions of less universal philosophies such as African Ubuntu ethics. Norren(2022) professes that the Organisation for Economic Cooperation and Development (OECD) and European Union (EU) precedence are used to contextualise AI literacy and AI ethics on behalf of the Global South. Most of the studies in the search results studies comes from the discipline of education, while there is a noticeable paucity of research from LIS sector and also Information Science. A number of noteworthy LIS studies from Malaysia covers the application of AI in LIS services. Library and information services has a negligible number of research studies on the topic, and those that were identified centres around the reasons and challenges why AI literacy facilitation is not yet in place. Asian regions such as China produce most of the research on AI literacy in higher education.

The philosophy of information is under-represented in these studies, and this may resonate with sentiments that many philosophical paradigms subscribe to Western approaches. Much greater diversity in how we approach ethics applied to AI is urgently required to represent the world's plurality of perspectives. In that sense, a culture grounded study of ethics and its applications to AI should irrigate any teaching pertaining to the subject.

Most studies connect AI literacy with ethics and the responsible use of AI. Some studies equate digital literacy to AI literacy, though it is apparent that these are distinctly different. Researchers and authors emphasise the need for further studies and frameworks that will enable higher education institutions to use AI responsibly and effectively, thereby improving overall quality of Education. Norrc ongoing research is needed to address the emerging field of AI literacy in teaching and learning. The interdisciplinary nature of AI literacy and subsequently AI ethics calls for better collaboration within higher education.

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