

INFORMATION LITERACY IN HIGHER EDUCATION: TRENDS, CHALLENGES, AND FUTURE DIRECTIONS

Meenakshi Devi

Library Assistant, SKUAST-Jammu

ABSTRACT

Information literacy has emerged as an essential competency in higher education, enabling students to navigate, evaluate, and ethically use information in an increasingly complex digital environment. The rapid growth of online resources, the widespread adoption of generative artificial intelligence, and the proliferation of misinformation have transformed the ways students access and engage with knowledge. This paper provides a comprehensive examination of information literacy in higher education by analysing key trends, persistent challenges, and future directions that will shape the field in the coming years.

Current trends reveal a significant shift from traditional library-based instruction toward more integrated and technology-enhanced approaches. Institutions are embedding information literacy across curricula, incorporating data literacy and critical digital literacy, and exploring the pedagogical implications of AI tools for research, writing, and source evaluation. There is also growing attention to equity, inclusion, and culturally responsive practices, ensuring that information literacy education addresses diverse student needs and reduces existing digital divides. Open educational resources and collaborative models involving faculty and librarians further reflect the evolving nature of instruction.

Despite these advances, several challenges continue to hinder effective implementation. Many students enter higher education with uneven levels of digital and information skills, while faculty often lack the time or training to integrate information literacy meaningfully into their courses. Resource limitations, inconsistent assessment methods, and the difficulty of measuring complex critical thinking skills pose additional barriers. The rise of AI-generated content and sophisticated misinformation further complicates efforts to teach evaluation and ethical use of information.

Keywords: Information literacy; Higher education; Digital literacy; Artificial intelligence; Misinformation; Curriculum integration; Data literacy; Lifelong learning

INTRODUCTION

In today's knowledge-driven society, the ability to effectively find, evaluate, use, and create information has become a fundamental requirement for academic success and informed citizenship. Information literacy, once primarily associated with library skills, has evolved into a broader set of critical competencies that enable individuals to navigate complex and rapidly changing information environments. In higher education, where students are expected to engage with scholarly literature, digital resources, and emerging technologies, information literacy plays a central role in supporting independent learning, critical thinking, and ethical scholarship.

The digital transformation of higher education has significantly expanded both the opportunities and the challenges related to information literacy. Students now have unprecedented access to vast amounts of information through online databases, open educational resources, social media platforms, and generative artificial intelligence tools. While this abundance of information offers new possibilities for research and learning, it also

introduces serious concerns, including the spread of misinformation, difficulties in assessing source credibility, and the ethical implications of using AI-generated content. As a result, higher education institutions are increasingly recognizing the need to equip students with advanced information literacy skills that go beyond basic search techniques.

Recent developments in the field reflect several important trends. These include the integration of information literacy into academic curricula, the growing emphasis on data literacy and critical digital literacy, the incorporation of artificial intelligence into teaching and learning practices, and a stronger focus on equity and inclusive approaches to instruction. At the same time, educators and librarians continue to face substantial challenges, such as varying levels of student preparedness, limited collaboration between faculty and library professionals, resource constraints, and the difficulty of assessing complex literacy competencies in meaningful ways.

OBJECTIVES OF THE PAPER

The main goal of this paper is to study information literacy in higher education by looking at new trends, problems, and future possibilities.

The specific objectives are:

1. To understand the new trends in teaching information literacy, such as the use of AI, data skills, and digital literacy.
2. To identify the main challenges faced by students, teachers, and librarians in developing information literacy skills.
3. To examine how technology, misinformation, and AI tools affect information literacy education.
4. To suggest simple and practical ways to improve information literacy teaching in the future.

LITERATURE REVIEW

Egunyemi et al. (2026) conducted a timely correlational survey examining how perceived usefulness and information literacy skills influence electronic library use among 215 students in three Colleges of Education in Osun State, Nigeria. The study found moderate perceived usefulness, high information literacy, predominantly academic use dominated by the World Wide Web, and significant positive relationships among the variables, with the two predictors jointly explaining about one-third of the variance in use ($R = .577$, Adjusted $R^2 = .333$). These results usefully affirm that perception and capability operate as complementary drivers of digital library engagement and support practical recommendations on infrastructure, orientation programmes, curriculum-embedded information literacy instruction, improved interfaces, and expanded resource subscriptions. While limited by its single-state sample and the incomplete reporting of scale properties in the available text, the paper makes a clear contribution to the literature on technology acceptance and digital library adoption in Nigerian teacher-education contexts and is recommended for institutional planners and library and information science researchers.

El Hassani (2015) examined the critical role of information literacy (IL) in higher education and lifelong learning amid the challenges of information overload and technological change, focusing on a practical initiative at Al Akhawayn University in Morocco. Drawing from a doctoral research project, the paper describes how the Mohammed VI Library has implemented IL instruction for undergraduate and graduate students through workshops, orientations, and collaborations—serving thousands of learners since 2007—and argues that

IL is an essential component of general education. El Hassani concludes that while the library-led programme has successfully laid foundational skills, its long-term effectiveness requires a broader university-wide strategy that embeds IL standards across the curriculum and strengthens partnerships between librarians and teaching faculty. The article offers a useful case study of IL development in a non-Western higher-education context and provides clear recommendations for institutional advancement.

Virkus (2011) examined the conceptual complexity of information literacy (IL) as a key competency for the twenty-first century, highlighting its lack of a universally accepted definition, its varied historical connotations, and its ambiguous, context-dependent, and contested nature. Drawing on a range of theoretical perspectives, she notes that IL can be understood as generic functional skills, situated social practices, or transformative abilities, and that debates continue regarding its relationship to other literacies such as digital literacy. Focusing on the European higher-education sector, Virkus argues that the term “information literacy” remains elusive and poorly understood by academics, students, and managers, and therefore advocates the alternative concept of “information-related competencies”—defined as the skills, knowledge, attitudes, and behaviours needed to find, evaluate, and use information effectively—as a clearer and more practical framework for integrating these abilities into curricula.

Markless’s (2009) article offers a thoughtful critique of conventional information literacy (IL) frameworks used in higher education and proposes a more flexible, learner-centred alternative better suited to digital and Web 2.0 environments. Drawing on principles of constructivism, variation theory, student reflection, and the decisive role of disciplinary and institutional context, Markless argues that existing models often remain too linear, skills-based, and decontextualized to support genuine IL development. She presents a new framework as a work-in-progress rather than a definitive blueprint, emphasising its potential to stimulate critical discourse and adaptive practice while calling for further empirical research into how students actually navigate and reflect on IL across different settings.

Angeley and Purdue (2000) defined information literacy as the ability to learn how to learn—knowing how knowledge is organized, how to find and evaluate information, and how to use it effectively for lifelong learning—drawing on the American Library Association’s influential description. They distinguish “nominal” literacy (basic technical skills) from “active” literacy (critical, transferable engagement with information across contexts) and argue that information literacy is not a radical departure from traditional higher-education goals of critical thinking and independent inquiry, but rather a necessary re-emphasis in response to the explosion of digital resources and the World Wide Web. The authors examine the evolving role of academic libraries as dynamic gateways rather than mere repositories, stress the importance of embedding information-literacy instruction within disciplinary courses through faculty–librarian collaboration, and discuss institutional, accreditation, and state-level drivers (particularly in Washington State) that were pushing campuses toward outcomes-based assessment of these competencies. Concluding that true information literacy centres on empowering individual students rather than serving external mandates, the piece remains a clear early articulation of why and how higher education should integrate information literacy across the curriculum.

METHODOLOGY

This paper adopts a qualitative research approach based on a systematic review of existing literature. The study does not involve primary data collection such as surveys or interviews.

Instead, it relies on secondary sources to examine trends, challenges, and future directions related to information literacy in higher education.

Relevant literature was collected from academic databases, scholarly journals, books, conference papers, and reports published by educational and library associations. Sources were selected based on their relevance to information literacy, higher education, digital literacy, artificial intelligence in education, and related themes. Preference was given to recent publications in order to reflect current developments in the field.

The selected literature was carefully reviewed and analysed to identify key patterns, emerging practices, common challenges, and recommended future approaches. The findings were then organized under three main themes: trends, challenges, and future directions. This thematic analysis helped in presenting a clear and structured discussion of the topic.

The methodology allows for a comprehensive understanding of the subject by synthesizing existing knowledge and highlighting important insights for educators, librarians, and policymakers.

CONCLUSION

Information literacy has become an essential skill for students in higher education in today's digital age. This paper has examined the major trends, challenges, and future directions related to information literacy in colleges and universities.

The discussion shows that information literacy is no longer limited to basic library skills. It now includes digital literacy, data literacy, critical evaluation of online information, and the responsible use of artificial intelligence tools. Institutions are increasingly trying to embed these skills into regular courses rather than offering them only through separate library sessions. At the same time, there is growing attention to making information literacy education more inclusive and accessible for all students.

However, several challenges continue to affect the effective teaching of information literacy. Many students enter higher education with unequal levels of digital and research skills. Collaboration between faculty and librarians is often limited, and institutions face constraints related to time, resources, and proper assessment methods. The rapid growth of misinformation and AI-generated content has further increased the difficulty of teaching students how to evaluate information critically.

Looking ahead, the future of information literacy depends on stronger institutional support, better integration of technology, and continuous updating of teaching methods. Developing AI-aware information literacy frameworks, encouraging greater faculty–librarian partnership, and focusing on lifelong learning will be important steps forward.

In conclusion, strengthening information literacy in higher education is necessary to prepare students for academic success and for responsible participation in an information-rich society. Educators, librarians, and policymakers must work together to ensure that students develop the skills needed to find, evaluate, and use information effectively in the years to come.

REFERENCES

1. Egunyemi, C. O., Ayoola, I. A., Nkwocha, A. C., & Famuyide, H. A. (2026). Perceived usefulness, information literacy skills, and electronic library use among students of Colleges of Education in Osun State, Nigeria. *Journal of Interdisciplinary Postgraduate Research*, 1(2), 188–195. <https://doi.org/10.61955/WUXWAB>

2. El Hassani, A. (2015). The role of information literacy in higher education: An initiative at Al Akhawayn University in Morocco. *Nordic Journal of Information Literacy in Higher Education*, 7(1), 32–37. <https://doi.org/10.15845/noril.v7i1.229>
3. Virkus, S. (2011). Information literacy as an important competency for the 21st century: Conceptual approaches. *Journal of the Bangladesh Association of Young Researchers*, 1(2), 15–29. <https://doi.org/10.3329/jbayr.v1i2.10028>
4. Markless, S. (2009). A new conception of information literacy for the digital learning environment in higher education. *Nordic Journal of Information Literacy in Higher Education*, 1(1), 25–40. <https://doi.org/10.15845/noril.v1i1.17>
5. Angeley, R., & Purdue, J. (2000, May). Information literacy: An overview. *Dialogue: A Forum for the Discussion of Teaching, Learning, and Assessment*, (6). Office of Institutional Assessment and Testing, Western Washington University.