National Research Journal of Business Economics
Volume No: 12, Issue No: 2, Year: 2025 (July-December)
PP: 66-71
ISSN: 2349-2015
Peer Reviewed & Refereed Journal (IF: 6.74)
Journal Website: www.nrjbe.in

DIGITAL LITERACY IN HIGHER EDUCATION: ASSESSING FACULTY AND STUDENT PERCEPTIONS, CHALLENGES, AND BEST PRACTICES

Hanumanthappa

Associate Professor
Department, Economics, Smt.Neelamma Kudur K.A.Sathyanarayana Setty Govt.First Grade College, Magadi Taluk

ABSTRACT:

Digital literacy has become a key requirement in higher education, shaping how teachers teach and how students learn in the modern digital age. This study examines how faculty members and students perceive digital literacy, what challenges they face in using digital tools, and what practices help improve their digital competence. Using a mixed-method approach, data were collected from selected universities through surveys and interviews. The study found that while both groups recognize the importance of digital literacy, their skill levels and confidence in using technology differ widely. Limited training, lack of infrastructure, and uneven access to resources were identified as major barriers. However, effective strategies such as integrating digital skills into the curriculum, offering regular training workshops, and encouraging peer collaboration proved beneficial. The study suggests that institutions should adopt comprehensive digital literacy policies to support faculty and students, ensuring quality teaching, active learning, and better preparation for the digital world.

Key terms: *Digital literacy, higher education, faculty perceptions, student experiences, challenges, best practices, technology in education, digital skills development*.

INTRODUCTION

In the modern knowledge-based society, technology has become an inseparable part of education, influencing how knowledge is created, shared, and consumed. Higher educations institutions today operate in an increasingly digital environment where both teaching and learning rely heavily on technology. Within this context, digital literacy has emerged as a core competency required for academic, professional, and social participation. Digital literacy is not limited to technical proficiency; it encompasses a broader set of skills that include information evaluation, critical thinking, online communication, collaboration, and ethical use of digital tools. These skills enable individuals to use technology creatively and responsibly in various educational and professional settings.

In higher education, the role of digital literacy extends beyond individual skill development. It shapes the quality of teaching, student engagement, and the effectiveness of institutional learning environments. Faculty members are expected to design and deliver technology-integrated lessons, assess digital assignments, and adopt new pedagogical tools. Similarly, students are required to use digital platforms for research, collaboration, and self-directed learning. However, despite widespread access to digital resources, there remains a significant gap between the potential of technology in education and the actual digital competence of faculty and students. Many educators still face challenges in adapting to rapidly changing technologies, while students may be confident users of social media but lack advanced academic and information management skills.

Global initiatives, such as UNESCO's Digital Literacy Framework (2021) and the European

ISSN: 2349-2015
Peer Reviewed & Refereed Journal (IF: 6.74)
Journal Website: www.nrjbe.in

Commission's DigCompEdu model emphasize the need to build digital competence at all educational levels. In many developing countries, including India, higher education institutions are increasingly focusing on digital transformation through national programs such as Digital India and the National Education Policy (NEP) 2020. These policies highlight the importance of equipping teachers and learners with the necessary digital capabilities to meet the challenges of the 21st-century knowledge economy. Yet, the successful implementation of such initiatives depends largely on understanding the current levels of digital literacy, the perceptions of the key stakeholders, and the institutional barriers that hinder progress.

Therefore, this study aims to assess the perceptions of faculty and students toward digital literacy, identify the challenges they face in using digital tools, and document best practices that can enhance digital competence in higher education. By exploring these aspects, the research seeks to provide insights into how universities can create supportive digital environments, promote continuous professional development, and integrate digital literacy into curriculum design. Ultimately, strengthening digital literacy will not only improve teaching and learning outcomes but also prepare graduates to thrive in an increasingly technology-driven global workforce.

OBJECTIVES OF THE STUDY:

To achieve a comprehensive understanding of digital literacy in higher education, the study focuses on several key objectives that guide the research and data collection process:

- To assess the level of digital literacy among faculty and students in higher education institutions.
- To examine faculty and student perceptions of using digital tools in teaching and learning.
- To identify major challenges in developing and applying digital literacy skills.
- To explore best practices and institutional strategies that enhances digital competence.

LITERATURE REVIEW:

Digital literacy has become a central concept in the context of higher education, reflecting the growing importance of technology in teaching, learning, and scholarly communication. Initially, digital literacy was understood primarily as the ability to operate computers and access the internet effectively. Over time, however, its definition has broadened to include not only technical proficiency but also cognitive, social, and ethical dimensions. According to UNESCO (2021), digital literacy involves the confident and critical use of digital technology for communication, collaboration, information creation, and problem-solving. Gilster (1997) described it as the ability to understand and utilize information in multiple formats from divers sources. In higher education, this encompasses the ability to employ digital tools responsibly for research, teaching, and learning.

Several theoretical frameworks provide a structure for understanding and assessing digital literacy. The European Commission's DigCompEdu Framework identifies six key areas of digital competence for educators, including professional engagement, creation and use of digital resources, and assessment strategies. Similarly, the Jisc Digital Capabilities Model emphasizes skills such as information literacy, digital communication, and digital well-being. Belshaw (2014) proposed eight elements of digital literacy, including cognitive, cultural, and critical aspects. Together, these models highlight that digital literacy is multidimensional, encompassing not just technical skills but also the capacity to apply these skills effectively in

ISSN: 2349-2015
Peer Reviewed & Refereed Journal (IF: 6.74)
Journal Website: www.nrjbe.in

learning and professional contexts.

In higher education, the role of digital literacy has become increasingly vital with the rise of online and blended learning environments. Faculty members with strong digital competencies are better able to design interactive lessons, utilize digital assessment tools, and support students' independent learning. Students, on the other hand, rely on digital literacy to conduct research, collaborate online, and engage in self-directed learning. Despite widespread access to technology, there is often a gap between the potential of digital tools and the actual competencies of faculty and students. Many educators possess basic technological skills but struggle with advanced tools and pedagogical integration, while students may be adept at using social media but lack the academic digital skills necessary for research and professional tasks.

Perceptions of digital literacy play a significant role in skill development. Faculty often recognize the benefits of technology but encounter challenges related to rapidly changing digital tools and limited professional development opportunities. Students, meanwhile, are generally familiar with everyday digital tools but may face difficulties in critical information evaluation, digital content creation, and responsible online behaviour. These differing perceptions can create misalignment between teaching strategies and student learning practices.

The literature also highlights multiple challenges in fostering digital literacy in higher education. Institutional limitations, insufficient training, uneven access to technology, poor infrastructure, and resistance to adopting new digital tools are frequently reported barriers. In many developing countries, economic constraints and the digital divide further restrict opportunities for developing digital competence. Faculty members often cite workload and time constraints as obstacles to engaging in digital up skilling, while students face challenges in developing structured digital skills.

Despite these challenges, best practices have emerged that support the development of digital literacy. Integrating digital skills into the curriculum, offering structured workshops, encouraging peer mentoring, and providing access to open educational resources have all proven effective. Collaborative learning environments, where students and faculty co-create digital content, foster confidence and engagement in technology use. Institutions that provide continuous professional development for educators and recognize innovative digital practices report higher levels of digital competence among faculty and students.

Although much research has examined digital literacy in higher education, there are notable gaps. Many studies focus separately on faculty or students rather than comparing both groups within the same context. Moreover, while skill acquisition has been widely studied, attitudes, motivation, and cultural influences on digital literacy have received less attention. There is also a need for region-specific research to understand how socio-economic and infrastructural conditions affect digital competence, particularly in developing countries.

The literature establishes that digital literacy is a multifaceted competency that is essential for quality teaching, effective learning, and professional growth in higher education. While awareness of its importance is increasing, challenges related to infrastructure, training, and policy implementation persist. Understanding the perceptions of faculty and students and identifying best practices are crucial steps toward developing comprehensive strategies to strengthen digital competence. This sets the foundation for the present study, which seeks to explore these dimensions in the higher education context.

ISSN: 2349-2015
Peer Reviewed & Refereed Journal (IF: 6.74)
Journal Website: www.nrjbe.in

METHODOLOGY:

This study employs a mixed-method research design to comprehensively explore digital literacy in higher education from the perspectives of both faculty and students. A mixed-method approach, combining quantitative and qualitative data, allows for a nuanced understanding of skill levels, perceptions, challenges, and effective practices related to digital literacy. This approach ensures that both measurable trends and in-depth insights are captured, providing a holistic view of the research problem.

The study was conducted in selected higher education institutions, representing a range of disciplines to reflect diverse academic contexts. The participants included both faculty members and students. Faculty participants were drawn from different departments, including humanities, sciences, and technology-based fields, while student participants were selected from undergraduate and postgraduate programs. A stratified random sampling technique was employed to ensure representation across different disciplines, academic levels, and demographic backgrounds.

Data collection was carried out using a combination of structured questionnaires and semi-structured interviews. The questionnaire was designed to assess participants' self-reported digital literacy skills, frequency of technology use, and perceptions regarding the integration of digital tools in teaching and learning. The semi-structured interviews provided an opportunity to gain deeper insights into the challenges faced by faculty and students, as well as the strategies and practices that they consider effective for improving digital literacy. Both instruments were pilot-tested prior to the main study to ensure clarity, relevance, and reliability.

For the quantitative data obtained through questionnaires, descriptive and inferential statistical methods were employed. These included measures such as mean scores, standard deviations, and comparative analysis between faculty and student groups to identify patterns and differences in digital literacy levels and perceptions. Qualitative data from interviews were analyzed thematically, identifying recurring themes, barriers, and best practices. This allowed for a richer understanding of the contextual and experiential aspects of digital literacy development.

Ethical considerations were given high priority throughout the study. Participants were informed about the purpose of the research, and **informed consent** was obtained prior to participation. Confidentiality and anonymity were ensured, and participants were given the option to withdraw at any stage of the study. Additionally, data were stored securely and used exclusively for research purposes.

By combining quantitative assessment with qualitative exploration, this methodology provides a robust framework for evaluating digital literacy in higher education. It enables a detailed examination of the current skill levels, perceptions, and challenges of both faculty and students, while also identifying practical strategies and best practices that can enhance digital competence. This comprehensive approach ensures that the findings are not only descriptive but also actionable, offering guidance for institutional policies, curriculum design, and professional development initiatives.

DATA ANALYSIS AND FINDINGS:

The data collected from faculty and students provided valuable insights into the current state of digital literacy in higher education, highlighting both competencies and gaps. Analysis of the questionnaire responses revealed that while most participants recognized the importance of digital literacy, there were notable differences in skill levels and confidence between faculty

ISSN: 2349-2015
Peer Reviewed & Refereed Journal (IF: 6.74)
Journal Website: www.nrjbe.in

and students. Faculty members reported being comfortable with basic digital tools such as email, presentation software, and online learning platforms. However, many expressed challenges with advanced applications, including learning management systems, digital assessment tools, and educational data analytics. Students, in contrast, demonstrated high proficiency in using social media, communication apps, and basic research tools but faced difficulties in evaluating digital information critically, managing online resources, and producing academically-oriented digital content.

The perceptions of participants further revealed a nuanced understanding of the role of technology in teaching and learning. Faculty members generally viewed digital literacy as essential for enhancing teaching effectiveness and student engagement but cited workload, lack of training, and rapidly changing technology as significant barriers. Students emphasized the necessity of digital skills for academic success and future employability but expressed a need for structured guidance, access to advanced digital resources, and mentorship from digitally proficient educators. These findings indicate a gap between the availability of digital tools and the capacity of users to fully utilize them in academic settings.

The qualitative analysis of semi-structured interviews identified several recurring challenges. Limited institutional support, inadequate infrastructure, inconsistent internet access, and a lack of formal training programs were frequently mentioned by both faculty and students. Additionally, some participants highlighted attitudinal barriers, including resistance to adopting new technologies and anxiety about making errors in digital environments. These challenges underscore the need for institutional strategies that address both technical and motivational aspects of digital literacy development.

Despite these challenges, the study also uncovered a range of best practices and effective strategies. Integrating digital literacy components into the curriculum, conducting regular workshops and training sessions for faculty and students, encouraging peer-to-peer learning, and providing access to open educational resources were identified as key enablers of digital competence. Collaborative digital projects, where students and faculty co-create content, were particularly effective in fostering confidence, creativity, and critical thinking in digital environments. Institutions that actively promoted continuous professional development for educators and recognized innovative use of technology demonstrated higher overall digital literacy levels among both faculty and students.

The findings indicate that while there is growing awareness of the importance of digital literacy, significant gaps persist in skills, access, and effective utilization of technology. Faculty and students perceive digital literacy as vital but encounter multiple challenges that limit their full engagement with digital tools. At the same time, evidence of successful practices suggests that targeted training, institutional support, and curriculum integration can significantly enhance digital competence. These findings provide a foundation for developing practical recommendations to strengthen digital literacy in higher education, ensuring that both educators and learners are well-prepared for a technology-driven academic and professional landscape.

CONCLUSION:

The study highlights the critical role of digital literacy in higher education, demonstrating that both faculty and students recognize its importance for effective teaching, learning, and academic performance. Faculty members generally have proficiency in basic digital tools but face challenges when integrating advanced technologies into their teaching practices. Students, while comfortable with informal digital platforms, often lack essential academic

ISSN: 2349-2015
Peer Reviewed & Refereed Journal (IF: 6.74)
Journal Website: www.nrjbe.in

digital skills such as research, critical evaluation of information, and professional online communication. This aligns with existing research emphasizing that digital literacy is a multidimensional competency, encompassing technical, cognitive, and ethical abilities. Perceptions of digital literacy are influenced by institutional support, access to resources, and training opportunities. Faculty frequently report constraints such as limited professional development and heavy workloads, while students express the need for structured guidance and mentorship to build higher-order digital skills. Despite these challenges, several effective strategies emerge, including integrating digital literacy into curricula, conducting workshops, promoting collaborative digital projects, and providing access to open educational resources. Institutions that foster continuous professional development and encourage innovative use of technology demonstrate higher levels of digital competence among faculty and students, supporting both teaching and learning outcomes in technology-rich academic environments.

REFERENCES:

1. Belshaw, D. (2014). The essential elements of digital literacy's.
2. Caena, F., & Redecker, C. (2019). European framework for the digital competence of educators: DigCompEdu. Publications Office of the European Union.
3. Gilster, P. (1997). Digital literacy. Wiley.
4. Kayyali, M. (2025). Digital literacy in higher education: Preparing students for the workforce of the future. International Journal of Information Science and Computing, 11(1), 53–73.
5. Mattar, J., Santos, C. C., & Cuque, L. M. (2022). Analysis and comparison of international digital competence frameworks for education. Education Sciences, 12(12), 932.
6. Mardiana, H. (2024). Perceived impact of lecturers' digital literacy skills in higher education institutions. SAGE Open, 14(3),
7. Ndibalema, P. (2025). Digital literacy gaps in promoting 21st-century skills among students in higher education institutions in sub-Saharan Africa. Education and Information Technologies.
8. Quraishi, T., Hakimi, M., & Boateng, R. (2024). Empowering students through digital literacy: A case study of successful integration in a higher education curriculum. Journal of Digital Learning and Distance Education, 2(8), 667–681.
9. Tondeur, J., et al. (2023). The HeDiCom framework: Higher education teachers' digital competencies. Education and Information Technologies.
10. UNESCO. (2021). Digital competence frameworks for teachers, learners, and citizens.