IAES International Journal of Artificial Intelligence (IJ-AI)
Vol. 14, No. 6, December 2025, pp. 4454~4460
ISSN: 2252-8938, DOI: 10.11591/ijai.v14.i6.pp4454-4460

Artificial intelligence for individuals with disabilities in higher education institutions: a systematic review

Finita Glory Roy[1], Friggita Johnson[2]
[1]Jindal Institute of Behavioral Sciences, O.P. Jindal Global University, Sonipat, India
[2]School of Education, Claflin University, Orangeburg, United States

Article Info

Article history:

Received Mar 13, 2025
Revised Aug 28, 2025
Accepted Oct 18, 2025

Keywords:

Accessibility in education
Artificial intelligence
Higher education
Inclusive education
Students with disabilities

ABSTRACT

With the growing integration of artificial intelligence (AI) in education, its potential to support students with disabilities in higher education remains significant but underexplored. This systematic review synthesizes existing literature on AI's effectiveness, barriers, and implications for inclusive education. Using the sample, phenomenon of interest, design, evaluation, and research type (SPIDER) framework, studies published between 2013 and 2024 were identified through a systematic search in databases such as PubMed, Scopus, Embase, Cochrane Library, and Google Scholar. Eighteen studies met the inclusion criteria, focusing on higher education settings and students with disabilities. The findings emphasize AI's role in enhancing accessibility, personalizing learning experiences, and fostering inclusiveness. However, persistent challenges include technological barriers, ethical concerns, and insufficient training. While AI holds transformative potential to support students with disabilities in higher education, addressing infrastructure gaps and ethical and training deficiencies is crucial for sustainable implementation and equitable learning environments.

Corresponding Author:

Finita Glory Roy
Jindal Institute of Behavioral Sciences, O.P. Jindal Global University
Narela Road, Sonipat, Haryana, India
Email: finita.roy@jgu.edu.in

1. INTRODUCTION

Artificial intelligence (AI) has emerged as a transformative tool in higher education, offering innovative solutions to enhance learning experiences for students with disabilities [1]. By addressing barriers such as inaccessible resources, limited adaptive technologies, and the lack of personalized support, AI holds the potential to foster inclusivity and equity in educational environments [2], [3]. Students with disabilities in higher education often face systemic challenges, including inaccessible learning materials, inflexible assessment formats, and insufficient personalized academic support. These barriers can significantly hinder their academic performance, engagement, and inclusion. In this context, when thoughtfully implemented, AI technologies can bridge existing gaps by offering customized, responsive educational solutions. AI-driven tools such as natural language processing for real-time captioning, adaptive learning systems, and virtual assistants are already used in mainstream education to create more engaging and personalized learning experiences. For example, automated transcription services help students with hearing impairments access lecture content, while AI-based tutoring platforms adjust the pace and difficulty of content to meet individual learning needs. These existing applications demonstrate AI's potential to be extended meaningfully to support learners with disabilities. Despite these advancements, several challenges persist. High implementation costs, limited AI literacy among educators and students, ethical concerns, and inadequate infrastructure hinder the widespread adoption of AI technologies, particularly in under-resourced institutions.

Furthermore, the absence of standardized frameworks for integrating AI into education systems creates additional barriers to its practical use. While many studies explore AI's general benefits in educational contexts, few have specifically focused on its application to students with disabilities in higher education. This systematic review aims to address that gap by synthesizing findings from recent studies to evaluate the effectiveness of AI-based interventions and their impact on learning outcomes for this population. It identifies successful applications while highlighting implementation challenges, such as technological barriers and resistance to change. The analysis underscores the importance of targeted investments in professional training, infrastructure development, and policy frameworks to support ethical and equitable AI adoption. This review aims to empower educators, policymakers, and technologists to leverage AI effectively by providing actionable insights. It advocates for a collaborative approach to create accessible, supportive educational ecosystems that promote inclusion and equity, ensuring a more inclusive future for students with disabilities in higher education. Research question: how do AI technologies impact the accessibility, learning outcomes, and challenges faced by students with disabilities in higher education, based on evidence from qualitative and quantitative studies, empirical research, and case studies? Based on the sample, phenomenon of interest, design, evaluation, and research type (SPIDER) framework [4].

2. METHOD

A preliminary search was conducted across major academic databases to assess the novelty of this review. It revealed a significant gap in systematic reviews addressing the impact of AI on higher education for individuals with disabilities. While separate studies explore AI in education or disability support, few systematically evaluate their intersection in higher education. This gap underscores the necessity of this review to provide a comprehensive synthesis of existing evidence and identify areas for future research. This review was structured using the SPIDER framework, which is particularly appropriate for qualitative and mixed-methods research. The search strategy aimed for inclusivity, covering both peer-reviewed and gray literature. Databases searched included PubMed, Embase, Scopus, Cochrane Library, Google Scholar, and ClinicalTrials.gov. Keywords and Boolean operators such as "artificial intelligence" OR "AI," AND "higher education" OR "universities," AND "disabilities" OR "special needs," AND "inclusive education" OR "accessibility" were used to ensure a comprehensive search. Variants like "assistive technology" and "adaptive learning systems" were also considered. The search was refined iteratively, and manual searches of reference lists and author correspondence for unpublished studies further expanded the scope. Studies published between 2013 and 2024 were included to reflect the most recent developments in AI. Eligible studies focused on AI interventions in higher education for students with disabilities, evaluating outcomes like accessibility, learning improvement, and user satisfaction. Studies were excluded if they focused on primary or secondary education, did not address disabilities, lacked empirical data, or were not published in English. Data management was conducted systematically, with duplicates removed using EndNote and Excel. The study selection process was carried out in two stages: an initial screening of titles and abstracts and a detailed full-text review. Two independent reviewers conducted the screenings, and disagreements were resolved through discussion or consultation with a third reviewer, thus reducing selection bias. The quality of the included studies was assessed using established tools. The Cochrane risk of bias tool was applied for randomized controlled trials, focusing on allocation concealment, blinding, and attrition [5]. The critical appraisal skills programme (CASP) checklists were used for observational and qualitative studies. Studies were categorized as high, moderate, or low quality based on predefined criteria, and lower-quality studies were included with caution and noted for their limitations. Data synthesis adopted a mixed-methods approach: qualitative data were analyzed using narrative synthesis to identify common themes such as AI-enabled accessibility, adaptive learning capabilities, and implementation barriers, while quantitative data were summarized using descriptive statistics for outcomes like accessibility scores and user satisfaction. Due to heterogeneity in study designs and outcome measures, a meta-analysis was not conducted; results were presented in a tabular format to facilitate comparison.

3. RESULTS AND DISCUSSION

3.1. Description of the PRISMA flow diagram for study selection

The PRISMA flow diagram [6] outlines the systematic study selection process in the review, comprising four main stages: identification, screening, eligibility, and inclusion. During the identification phase, a comprehensive search across multiple databases and other sources resulted in a large pool of records. After removing duplicates, several unique studies were retained for further evaluation. In the screening phase, the titles and abstracts of these studies were assessed against predefined inclusion criteria, and irrelevant or non-qualifying studies were excluded. The eligibility stage involved a detailed review of full-text articles, with exclusions for insufficient data, lack of relevance, or methodological shortcomings.

Finally, the inclusion stage narrowed down the studies that met all criteria, forming the basis for analysis and discussion in the systematic review. This process is visualized in the PRISMA flow diagram as shown in Figure 1, ensuring transparency and reproducibility in study selection.

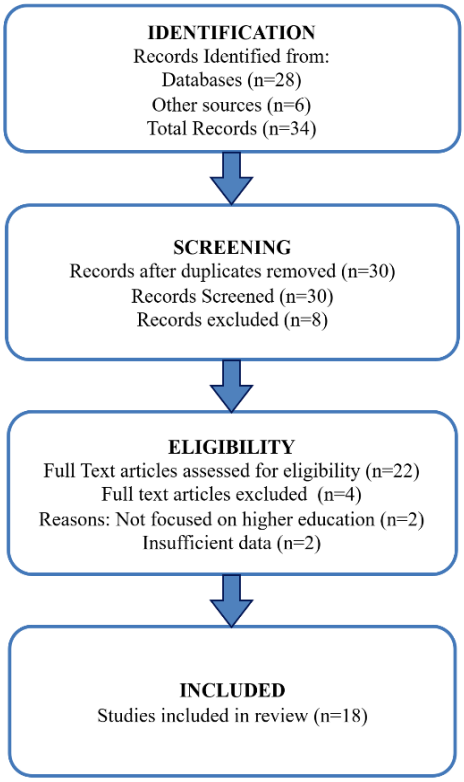

Figure 1. Flow diagram of study selection: PRISMA flow diagram

3.2. Overview of included studies

A total of 18 studies were included in the final analysis, each exploring the use of AI in supporting students with disabilities in higher education. These studies showcased various AI applications ranging from assistive technologies and adaptive learning systems to faculty development tools, aiming to enhance accessibility, personalization, and inclusivity. The diversity of interventions underscores the growing recognition of AI's role in addressing learning barriers for students with disabilities. These studies are summarized in Table 1.

3.3. Key findings

3.3.1. Thematic analysis of AI integration in inclusive higher education

The key themes emerging from the included studies were organized into four categories: accessibility and personalization, equity and inclusion, ethical and policy considerations, and technological and resource barriers.

i) Enhanced accessibility and personalization: AI technologies were consistently highlighted for improving accessibility through features like text-to-speech, speech-to-text, real-time captioning, and adaptive content delivery systems. For instance, students with visual or hearing impairments benefited significantly from AI-based captioning and transcription services, which enhanced their access to lectures and digital content [7]–[9]. Personalized learning was another central theme, with adaptive algorithms adjusting content complexity and pacing to suit individual cognitive needs. AI-powered platforms also contributed to active student engagement through interactive simulations, gamified environments, and automated feedback mechanisms. Quantitatively, studies reported improvements such as a 15% increase in academic performance and higher satisfaction scores among students using AI tools.

ii) Equity and inclusion: several studies emphasized the potential of AI to promote equitable learning experiences. AI tools helped bridge systemic educational gaps by supporting students from marginalized backgrounds, including those with disabilities [10], [11]. For example, institutions deploying AI-enabled inclusive practices were better able to support students' skill-building in areas critical to academic and workforce success. However, the need for culturally responsive and socioeconomically adaptive AI tools was noted, particularly in cross-national contexts. Korea and Alexopoulos [7] pointed out that standardized AI models might reinforce existing inequalities if not tailored to diverse student needs.

iii) Ethical and policy challenges: despite their promise, AI systems present complex ethical challenges. These include data privacy concerns, algorithmic bias, and misuse of AI-generated content [12], [13]. For instance, automated tools not designed with disability-specific inputs may inadvertently exclude or misrepresent the needs of students with disabilities. Crompton and Burke [14] further highlighted that many AI tools lack optimization for accessibility, limiting their impact on inclusive education. The literature calls for developing ethical guidelines, transparency protocols, and policy frameworks to ensure responsible AI use in academic environments.

iv) Technological and resource barriers: one of the most cited challenges was the digital divide, especially in under-resourced institutions. Barriers such as limited AI literacy among faculty, high implementation costs, and inadequate infrastructure were frequently reported [15], [16]. For example, Gabriel [11] noted that schools in rural or low-income areas face significant limitations in internet access, modern equipment, and AI training resources. These factors reduce AI interventions' potential reach and exacerbate educational inequities.

3.3.2. Emerging challenges

In addition to the thematic findings, the review identified several emerging challenges affecting AI integration in inclusive higher education:

- Resistance to AI adoption: many educators and stakeholders remain hesitant to adopt AI technologies due to unfamiliarity or scepticism about their utility. This resistance impedes innovation and limits systemic change.
- Professional development gaps: educators often lack the training to effectively integrate AI into their teaching practices. Marino *et al.* [17] stressed the importance of structured professional development programs focused on AI tools and pedagogical strategies.
- Infrastructure deficiencies: according to Hopcan *et al.* [18], the lack of robust digital infrastructure, particularly in low-income or rural institutions, hinders the deployment of AI in higher education. Without foundational technological resources, AI cannot be implemented at scale.
- Ethical and privacy concerns: with AI systems increasingly relying on student data, ethical concerns around data ownership, storage, and consent have intensified. Alkan [19] has called for clear institutional policies and student-centred safeguards to ensure ethical use.

This systematic review highlights the transformative potential of AI in enhancing accessibility, personalization, and inclusion for students with disabilities in higher education. The findings reveal that AI tools such as real-time captioning, speech-to-text, and adaptive learning systems significantly reduce traditional barriers by automating accommodations previously dependent on human support, such as note-takers or tutors [20], [21]. These technologies promote autonomy and equal participation in academic environments [22], [23]. Moreover, AI's ability to personalize content delivery supports students with cognitive or processing difficulties by adapting instructional methods to individual needs [24], [25]. However, realizing the full benefits of AI requires strategic integration supported by institutional commitment and ethical design. For higher education institutions, this includes investing in digital infrastructure, developing AI literacy among educators, enforcing inclusive policy frameworks, and creating support systems to use AI tools effectively [26]–[28]. For developers, it is critical to incorporate universal design principles, ensure data privacy and algorithmic transparency, and co-create solutions with users who have disabilities [25].

Despite the promising trends, gaps remain in the literature. Most studies are limited to pilot interventions or short-term assessments, indicating a need for future research focused on real-world classroom implementations, longitudinal impact evaluations, and cross-cultural comparisons [22], [23]. Additionally, the development of AI tools tailored to specific disabilities such as autism, attention deficit hyperactivity disorder (ADHD), and multiple disabilities remains underexplored [20], [21]. Involving students with disabilities in the design and testing process can ensure that AI systems are responsive to their lived experiences and educational needs [24], [25]. Overall, the review advocates for a collaborative, ethical, and student-centered approach to AI integration in higher education, ensuring that technology becomes a tool for empowerment and inclusion rather than a source of further inequity [27], [28].

Table 1. Key studies on the impact and challenges of artificial intelligence in special needs and inclusive education

Ref	Focus area	Key findings	Challenges	Recommendations
[22]	AI in inclusive pedagogy for special needs education	AI enhances accessibility for disabilities and supports inclusive teaching. Framework proposed for future use.	Limited data availability; lack of teacher training.	Develop comprehensive frameworks and increase teacher training.
[15]	AI in higher education for students with disabilities	AI personalizes and enhances learning for students with disabilities.	Technological barriers, cost issues, and lack of training.	Address technological gaps, ensure affordability, and train staff for effective AI use.
[9]	Assistive technologies and blended learning in special education	AI-based assistive technologies improve access and interaction with content; blended learning enhances inclusivity.	Lack of infrastructure and expertise in blended learning approaches.	Strengthen assistive technology integration and train educators in blended learning models.
[10]	Faculty perspectives on AI in higher education	Four faculty profiles identified; equity in education as AI's greatest benefit; self-efficacy linked to usage.	Lack of AI literacy and professional development for faculty and students.	Establish professional development programs and support services for sustainable integration.
[23]	AI in special needs education for children	AI enhances education for children with disabilities; proposes ASD classification framework.	Limited research and practical implementation challenges.	Expand research and pilot frameworks for inclusive education through AI.
[28]	AI's impact on pre-service teacher education	AI improves language skills and global knowledge access but faces low adoption rates and concerns over critical thinking.	Ambivalence towards AI, lack of practical application, plagiarism concerns.	Improve AI literacy and promote inclusion-oriented AI use in teacher training programs.
[11]	AI's impact on inclusive education	AI motivates students and supports inclusion; identifies technical and pedagogical barriers.	Technological challenges, connectivity issues, database limitations.	Improve infrastructure, focus on pedagogical strategies, and ensure reliable technology access.
[17]	AI as a transformative technology for special education	AI holds disruptive potential; requires ethical considerations and teacher preparation.	Ethical concerns, lack of extensive research, and policy gaps.	Conduct more research, create policies, and prepare teachers for AI integration.
[7]	AI in language teaching for students with specific learning disabilities (SpLDs)	Students recognize AI's benefits for skill development but highlight concerns like ready-made answers and stakeholder resistance.	Resistance from parents and teachers, AI misuse concerns.	Encourage stakeholder support, train educators, and address ethical concerns.
[14]	AI trends in higher education from 2016 to 2022	There is significant increase in publications on AI in higher education, especially in China; AI is used primarily for assessment, prediction, tutoring, and learning management.	Lack of inclusivity and tools for diverse groups.	Expand research in underrepresented areas; explore tools like ChatGPT for new applications.
[16]	Teachers' use of AI in learning disability education in Jordan	Medium-level teacher knowledge of AI application; high degree of challenges identified by teachers.	Limited professional development for teachers; resource and knowledge gaps.	Targeted professional development; comprehensive strategies to empower teachers in special education.
[8]	AI's role in personalized learning for special needs post-COVID-19	AI can adapt content and pace to individual needs; gaps exist in addressing learners with disabilities in current AI research.	Digital divide and exclusion; lack of tailored AI tools for special needs learners.	Invest in AI tools to bridge the digital divide and enhance inclusivity for learners with disabilities.
[13]	Broader application of AI in collaborative learning, tutoring, and assessment	AI improves collaborative learning, personalized tutoring, and automated assessments; ethical issues and system misuse are highlighted.	Ethical concerns and potential misuse of AI tools in education.	Implement ethical guardrails and responsible AI use policies in educational systems.
[18]	AI's role in teaching and supporting students with 15 disabilities in China	AI aids in teaching, learning, and parental supervision; AI needs standardization for disability classification and support.	Lack of digital standards for AI use in special education.	Develop AI standards for special education; refine the scope and functions of AI for disabilities.
[20]	Past decade innovation in AI for students with special needs	AI has improved diagnosis and intervention for SEN learners, enhancing their quality of life.	Early-stage AI tools had limited scalability and accessibility.	Expand AI-driven diagnosis and interventions; promote inclusion in early education technology innovations.
[12]	Generative AI's transformative impact on HE	Policies are emerging to manage AI use; GAI helps optimize teaching, learning, and research.	Academic dishonesty concerns privacy issues related to AI use.	Integrate multidisciplinary AI training; refine policies on GAI use to ensure ethical practices.
[27]	Comprehensive AI literacy initiatives across disciplines	AI literacy as a core competency; interdisciplinary curriculum fostering readiness for AI-driven careers.	Challenges in achieving inclusivity and scalability of AI education models.	Promote AI literacy across all levels; design inclusive AI education frameworks.
[25]	AI for understanding and overcoming barriers for students with disabilities	AI systems can interpret barriers and recommend solutions; thematic analysis identifies ways students describe disabilities and needs.	Limited AI tools for nuanced understanding of disabilities and barrier-specific recommendations.	Design AI systems for detailed disability support and crowdsource knowledge for inclusive education.
[24]	AI-based support for improving academic performance of students with learning disabilities	Personalized AI tools mitigate learning disabilities' impact on performance and foster tailored educational interventions.	The complex interplay of factors influencing academic performance requires sophisticated AI tools.	Develop AI-driven decision support systems for personalized learning strategies.
[21]	AI as assistive technology for disability education	AI enhances interaction and learning for children with disabilities using adaptive and assistive devices.	Accessibility challenges in AI tool deployment; resource constraints.	Promote AI tool accessibility; invest in assistive technology development for diverse learners.

4. CONCLUSION

This systematic review underscores the growing potential of AI to support students with disabilities in higher education by enhancing accessibility, personalizing learning experiences, and fostering inclusion. AI tools such as real-time captioning, adaptive learning systems, and text-to-speech applications are valuable in addressing diverse learning needs and reducing dependence on manual accommodations. However, widespread adoption remains limited by challenges such as inadequate infrastructure, a lack of AI literacy among educators, ethical concerns around data privacy, and insufficient customization of tools for different disabilities. Despite the valuable insights gathered, this review has limitations. It included only studies published in English and may have missed relevant research available in other languages or unpublished formats, introducing potential language and publication bias. Additionally, the heterogeneity of study designs and outcomes limited the possibility of conducting a meta-analysis, and findings are based primarily on short-term or pilot interventions rather than long-term classroom-based evaluations. A concerted effort is needed to harness AI's full potential in inclusive education. Policymakers must develop clear ethical and accessibility guidelines, while institutions should invest in educator training and robust digital infrastructure. AI developers are encouraged to adopt universal design principles and involve students with disabilities in co-creating responsive and ethical tools. Moving forward, interdisciplinary collaboration is essential to ensure that AI technologies do not widen educational gaps but instead become powerful enablers of equity, inclusion, and academic success for all learners.

FUNDING INFORMATION

The author states that it is self-funded.

AUTHOR CONTRIBUTIONS STATEMENT

This journal uses the Contributor Roles Taxonomy (CRediT) to recognize individual author contributions, reduce authorship disputes, and facilitate collaboration.

Name of Author	C	M	So	Va	Fo	I	R	D	O	E	Vi	Su	P	Fu
Finita Glory Roy	✓	✓	✓	✓	✓	✓		✓	✓	✓			✓	
Friggita Johnson	✓	✓				✓		✓	✓	✓	✓	✓		

C : **C**onceptualization
M : **M**ethodology
So : **So**ftware
Va : **Va**lidation
Fo : **Fo**rmal analysis
I : **I**nvestigation
R : **R**esources
D : **D**ata Curation
O : Writing - **O**riginal Draft
E : Writing - Review & **E**diting
Vi : **Vi**sualization
Su : **Su**pervision
P : **P**roject administration
Fu : **Fu**nding acquisition

CONFLICT OF INTEREST STATEMENT

Authors state no conflict of interest.

DATA AVAILABILITY

The authors confirm that the data supporting the findings of this study are available within the article and/or its supplementary materials

REFERENCES

[1] S. Mishra, "Applications of artificial intelligence in education," in *Artificial Intelligence in Education: Revolutionizing Learning and Teaching*, *Redshine Archive*, vol. 14, no. 7, 2020, doi: 10.25215/9358094575.02.
[2] N. Pinkwart and S. Beudt, Artificial intelligence as a supportive learning technology (*in German*: *Künstliche Intelligenz als unterstützende Lerntechnologie*). Stuttgart, Germany: Fraunhofer IAO, 2020, doi: 10.24406/publica-fhg-300786.
[3] C. d. Witt, F. Rampelt, and N. Pinkwart, "Whitepaper 'Künstliche Intelligenz in der Hochschulbildung'," Berlin: KI-Campus Die Lernplattform für Künstliche Intelligenz, 2020, doi: 10.5281/zenodo.4063722.
[4] A. Cooke, D. Smith, and A. Booth, "Beyond PICO," *Qualitative Health Research*, vol. 22, no. 10, 2012, doi: 10.1177/1049732312452938.
[5] L. Jørgensen *et al.*, "Evaluation of the Cochrane tool for assessing risk of bias in randomized clinical trials: overview of published comments and analysis of user practice in Cochrane and non-Cochrane reviews," *Systematic Reviews*, vol. 5, no. 1, 2016, doi: 10.1186/s13643-016-0259-8.
[6] A. Liberati *et al.*, "The PRISMA statement for reporting systematic reviews and meta-analyses of studies that evaluate health care interventions: explanation and elaboration," *PLoS Medicine*, vol. 6, no. 7, 2009, doi: 10.1371/journal.pmed.1000100.
[7] M. D. Korea and P. Alexopoulos, "Higher education students' views on the use of artificial intelligence for teaching students with specific learning disabilities," *European Journal of Open Education and E-learning Studies*, vol. 9, no. 1, 2024, doi: 10.46827/ejoe.v9i1.5518.
[8] Y. Mpu, "Bridging the knowledge gap on special needs learner support: the use of artificial intelligence (AI) to combat digital divide post-COVID-19 Pandemic and beyond – a comprehensive literature review," in *Intellectual and Learning Disabilities - Inclusiveness and Contemporary Teaching Environments.* London, United Kingdom: IntechOpen, 2024, doi: 10.5772/intechopen.113054.

[9] E. Z. Zavaraki, "Artificial intelligence for people with special educational needs," in *Artificial Intelligence and Education, Shaping the Future of Learning*. London, United Kingdom: IntechOpen, 2024, doi: 10.5772/intechopen.1004158.
[10] D.-K. Mah and N. Groß, "Artificial intelligence in higher education: exploring faculty use, self-efficacy, distinct profiles, and professional development needs," *International Journal of Educational Technology in Higher Education*, vol. 21, no. 1, 2024, doi: 10.1186/s41239-024-00490-1.
[11] J. Gabriel, "How artificial intelligence (AI) impacts inclusive education," *Educational Research and Reviews*, vol. 19, no. 6, pp. 95–103, 2024, doi: 10.5897/ERR2024.4404.
[12] N. Kshetri and J. Voas, "Adapting to generative artificial intelligence: approaches in higher education institutions," *Computer*, vol. 57, no. 9, pp. 128–133, 2024, doi: 10.1109/MC.2024.3422589.
[13] F. Kamalov, D. S. Calonge, and I. Gurrib, "New era of artificial intelligence in education: towards a sustainable multifaceted revolution," *Sustainability*, vol. 15, no. 16, 2023, doi: 10.3390/su151612451.
[14] H. Crompton and D. Burke, "Artificial intelligence in higher education: the state of the field," *International Journal of Educational Technology in Higher Education*, vol. 20, no. 1, 2023, doi: 10.1186/s41239-023-00392-8.
[15] O. Omiegbe, "Artificial intelligence in higher education: bridging the gap for students with disabilities," *British Journal of Education*, vol. 12, no. 12, pp. 38–50, 2024, doi: 10.37745/bje.2013/vol12n123850.
[16] M. M. Najadat and K. A. Obeidat, "The reality of employing artificial intelligence applications and its challenges in teaching people with learning disabilities from the point of view of teachers (SDG'S)," *Journal of Lifestyle and SDGs Review*, vol. 4, no. 4, 2024, doi: 10.47172/2965-730X.SDGsReview.v4.n04.pe02939.
[17] M. T. Marino, E. Vasquez, L. Dieker, J. Basham, and J. Blackorby, "The future of artificial intelligence in special education technology," *Journal of Special Education Technology*, vol. 38, no. 3, pp. 404-416, 2023, doi: 10.1177/01626434231165977.
[18] S. Hopcan, E. Polat, M. E. Ozturk, and L. Ozturk, "Artificial intelligence in special education: a systematic review," *Interactive Learning Environments*, vol. 31, no. 10, pp. 7335–7353, 2023, doi: 10.1080/10494820.2022.2067186.
[19] A. Alkan, "The role of artificial intelligence in the education of students with special needs," *International Journal of Technology in Education and Science*, vol. 8, no. 4, pp. 542–557, 2024, doi: 10.46328/ijtes.569.
[20] A. Drigas and R.-E. Ioannidou, "Artificial intelligence in special education: a decade review," *International Journal of Engineering Education*, vol. 28, no. 6, pp. 1366–1372, 2012.
[21] S. T. Ojha, "Artificial intelligence in special education, ID & CP," *Journal of Positive School Psychology*, vol. 6, no. 6, pp. 8341–8345, 2022.
[22] S. Garg and S. Sharma, "Impact of artificial intelligence in special need education to promote inclusive pedagogy," *International Journal of Information and Education Technology*, vol. 10, no. 7, pp. 523–527, 2020, doi: 10.18178/ijiet.2020.10.7.1418.
[23] C. H. Neeharika and Y. M. Riyazuddin, "Artificial intelligence in children with special need education," in *2023 International Conference on Intelligent Data Communication Technologies and Internet of Things*, 2023, pp. 519–523, doi: 10.1109/IDCIoT56793.2023.10053420.
[24] A. Bressane *et al.*, "Understanding the role of study strategies and learning disabilities on student academic performance to enhance educational approaches: a proposal using artificial intelligence," *Computers and Education: Artificial Intelligence*, vol. 6, Jun. 2024, doi: 10.1016/j.caeai.2023.100196.
[25] T. Coughlan, F. Iniesto, and J. E. Carr, "Analysing disability descriptions and student suggestions as a foundation to overcome barriers to learning," *Journal of Interactive Media in Education*, vol. 2024, no. 1, 2024, doi: 10.5334/jime.836.
[26] H. U. Rahiman and R. Kodikal, "Revolutionizing education: artificial intelligence empowered learning in higher education," *Cogent Education*, vol. 11, no. 1, 2024, doi: 10.1080/2331186X.2023.2293431.
[27] J. Southworth *et al.*, "Developing a model for AI Across the curriculum: transforming the higher education landscape via innovation in AI literacy," *Computers and Education: Artificial Intelligence*, vol. 4, 2023, doi: 10.1016/j.caeai.2023.100127.
[28] D. Kalniņa, D. Nīmante, and S. Baranova, "Artificial intelligence for higher education: benefits and challenges for pre-service teachers," *Frontiers in Education*, vol. 9, 2024, doi: 10.3389/feduc.2024.1501819.

BIOGRAPHIES OF AUTHORS

Dr. Finita Glory Roy is an Associate Professor at the Jindal Institute of Behavioural Sciences, O.P. Jindal Global University, Haryana, India. With over 30 years of academic experience, she specializes in rehabilitation science, disability studies, inclusive education, and community mental health. She holds a Ph.D. in Rehabilitation Science and Special Education and advanced healthcare education training from Hogeschool Zuyd University, the Netherlands. She has contributed to curriculum development, interdisciplinary research, and community outreach initiatives. Her current work focuses on the intersection of disability, gender, and environmental vulnerability, with a strong commitment to policy advocacy and inclusive development. She has published several peer-reviewed journal articles and presented at national and international conferences. She is a certified rehabilitation counselor and an active member of professional bodies, including the Rehabilitation Council of India, the Council for Exceptional Children, and the All-India Psychologists Association. She can be contacted at email: finita.roy@jgu.edu.in.

Friggita Johnson is an Assistant Professor of Education at Claflin University, South Carolina, USA, focusing on preparing teacher candidates to be leaders and reflective practitioners. She holds a South Carolina Teaching Licensure in multiple areas and is a certified South Carolina Evaluator. She emphasizes engaging diversity and connecting research to practice in her teaching. She has presented at various prestigious conferences and served as an invited speaker and guest lecturer internationally. Her work has been published in journals, and she has been a reviewer for several educational journals and conferences. She is the PI of a U.S. Department of Education OSEP grant of $750,000 to address state-identified needs for personnel preparation in special education. She can be contacted at email: frijohnson@claflin.edu.