Cover Page

INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY EDUCATIONAL RESEARCH
ISSN:2277-7881(Print); IMPACT FACTOR :10.16(2026); IC VALUE:5.16; ISI VALUE:2.286
Peer-Peer Reviewed, Refereed & Open Access International Journal - As per UGC Norms
(Fulfilled Suggests Parameters of UGC by IJMER)
Volume:15, Issue:9(1), September 2026
Scopus Review ID: A2B96D3ACF3FEA2A
Article Received: Reviewed: Accepted
Publisher: Sucharitha Publication, India
Online Copy of Article Publication Available: www.ijmer.in

THE ERA OF ARTIFICIAL INTELLIGENCE: COMPUTER EDUCATION

[1]B. Radha and [2]C. Deepa
[1]Assistant Professor, Avinash College of Commerce, Hyderabad
[2]Associate Professor, Avinash College of Commerce, Hyderabad

Abstract

This study investigates the impact of artificial intelligence (AI) on the educational landscape, focusing on the changing roles of educators and the curricular transformations required to prepare students for an AI-driven future, with a particular emphasis on the Indian context. Employing an exploratory approach, this research paper synthesizes qualitative data from in-depth semi-structured interviews with five academicians and five industry professionals in India. Thematic analysis was conducted to extract and interpret the prevalent themes from the interview data. The findings reveal a paradigm shift in the role of educators, from traditional teaching to facilitating personalized learning experiences augmented by AI. The analysis also suggests a pressing need for curricular updates to include comprehensive AI education and an interdisciplinary approach, coupled with a focus on nurturing problem-solving and communication skills amongst students. This paper outlines actionable strategies for Indian educators to integrate AI into their pedagogical practices and curriculum design, highlighting the significance of hands-on AI tool exposure, ethical training in AI, and the development of continuous learning mechanisms for students. The paper is unique due to its exploration of the Indian educational sector's response to the integration of AI. It provides a unique Indian perspective, underlining the value of cultural and regional considerations in the global conversation about AI's role in shaping future learning.

Keywords: Artificial Intelligence, Education in India, Curriculum Innovation, Pedagogy, Ethics in AI.

Introduction

Artificial Intelligence (AI), the simulation of human intelligence processes by machines, especially computer systems, has evolved remarkably over the years, finding applications across sectors such as healthcare, finance, and transportation (Abduljabbar et al., 2019; Yu et al., 2018). The increasing sophistication of AI technologies has ushered in new tools and platforms that are reshaping traditional practices and enabling new forms of interaction and service delivery.

In the realm of education, AI's impact has been transformative, introducing adaptive learning systems, intelligent tutoring, and personalized educational experiences (Adiguzel et al., 2023; Chan, 2023). This technological revolution has the potential to redefine pedagogical methods and academic content delivery, catering to individual learner needs with unprecedented precision.

India, with its burgeoning student population, presents a particularly interesting case study. The country boasts over 37.4 million students enrolled in higher education, with technical disciplines like computer science and engineering drawing significant interest (All India Survey on Higher Education [AISHE], 2019-20). These fields are critical given the growing concern that AI might replace human jobs, emphasizing the urgency for skill enhancement to ensure employability and career progression in an AI-centric future.

Globally, research efforts have been dedicated to understanding AI's impact on education, with studies by authors such as Luckin (2017) and Roll & Wylie (2016) examining the implications of AI-generated content for learning and assessment. Despite the global focus, there is a dearth of research specifically examining the implications of AI within the Indian educational context.

Considering India's unique socio-economic landscape, cultural diversity, and its status as a burgeoning technology hub, it is crucial to explore how AI impacts education in the Indian scenario. Such an exploration is not only timely but necessary to inform policy, curriculum design, and pedagogical strategies that are culturally relevant and technologically advanced.

Cover Page

INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY EDUCATIONAL RESEARCH
ISSN:2277-7881(Print); IMPACT FACTOR :10.16(2026); IC VALUE:5.16; ISI VALUE:2.286
Peer-Peer Reviewed, Refereed & Open Access International Journal - As per UGC Norms
(Fulfilled Suggests Parameters of UGC by IJMER)
Volume:15, Issue:9(1), September 2026
Scopus Review ID: A2B96D3ACF3FEA2A
Article Received: Reviewed: Accepted
Publisher: Sucharitha Publication, India
Online Copy of Article Publication Available: www.ijmer.in

Therefore, this research paper attempts to address the following research questions:

RQ1: What are the perceptions of Indian educators and industry professionals on the the impact of AI on general and computer education?

RQ2: What are the necessary curriculum changes in Indian computer science and engineering education to equip students with the skills required in an AI-dominated professional landscape?

RQ3: In what ways can Indian higher education institutions adapt their pedagogical approaches to prepare students for the ethical considerations and practical applications of AI in various industries?

RQ4: How can Indian education systems evolve to mitigate the risk of job displacement due to AI advancements?

The paper is organised as follows. The next section carries an in-depth literature review on AI in education, its impact on jobs and the need to modify education in the AI regime. The research methodology used by the study is described next, which is followed by the findings of the exploratory study and their discussion. The conclusion discusses the limitations of the study, its theoretical and practical implications and scope for further research.

Literature Review

Artificial Intelligence in Education: Meaning and Evolution

Artificial Intelligence (AI) in education encapsulates the integration of advanced computational technologies, such as machine learning algorithms, intelligent software, and data analytics, into the educational sphere. This integration aims to enhance and personalize learning experiences, streamline administrative processes, and offer deep insights into the learning journey of students. As outlined by Luckin (2017) and Roll & Wylie (2016), the evolution of AI in education has been a journey from basic computer-aided instruction to the current state of sophisticated adaptive learning systems and intelligent tutoring. The development of AI in education has shifted the focus towards more personalized learning environments and provided data-driven insights into student performance and learning needs.

In terms of its application, AI manifests in various forms within the educational landscape. Intelligent Tutoring Systems (ITS), as discussed by Luckin & Holmes (2016), exemplify AI's capacity to offer customized instruction and feedback, closely mirroring the benefits of one-on-one tutoring experiences. Adaptive learning platforms, highlighted in the work of Adiguzel et al. (2023), adjust learning content and paths based on individual student's performance and learning preferences, thus promoting a more personalized learning experience.

Another significant application of AI is in automated essay scoring and feedback, where AI algorithms are employed to evaluate and offer feedback on student's written assignments, thereby aiding the development of writing skills. This application is particularly noted in Chan's (2023) work. Furthermore, AI's role in data analytics and predictive modeling is crucial in educational settings. It enables the analysis of large sets of educational data to predict student outcomes and identify potential areas for intervention, as explored by Cotton et al. (2023).

Additionally, Virtual Reality (VR) and Augmented Reality (AR) technologies, driven by AI, create immersive and interactive learning experiences. These technologies have been effective in enhancing student engagement and understanding of complex concepts, as discussed by Bholat & Susskind (2021).

AI's application in education spans across various levels. In primary and secondary education, AI focuses on enhancing personalized learning experiences, automating grading processes, and supporting teachers with administrative tasks, as noted by Cavendish (2023). In the context of higher education, AI is instrumental for advanced research purposes, providing interactive learning environments, and facilitating remote and distance learning, a notion supported by Yu et al. (2018) and Olafare (2023).

Cover Page

INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY EDUCATIONAL RESEARCH
ISSN:2277-7881(Print); IMPACT FACTOR :10.16(2026); IC VALUE:5.16; ISI VALUE:2.286
Peer-Peer Reviewed, Refereed & Open Access International Journal - As per UGC Norms
(Fulfilled Suggests Parameters of UGC by IJMER)
Volume:15, Issue:9(1), September 2026
Scopus Review ID: A2B96D3ACF3FEA2A
Article Received: Reviewed: Accepted
Publisher: Sucharitha Publication, India
Online Copy of Article Publication Available: www.ijmer.in

For professional and continuing education, AI supports lifelong learning through adaptive learning platforms and personalized content delivery. This aspect of AI is particularly relevant to cater to the evolving needs of professionals in various fields, as observed by Aoun (2017).

Despite the numerous benefits AI brings to the educational sector, it is not without its challenges. Ethical concerns, the digital divide, data privacy issues, and the potential impact on students' critical thinking skills are significant challenges that need addressing. Civil (2023) and Shaukat et al. (2020) have particularly highlighted concerns regarding AI's impact on critical thinking skills. Additionally, the ongoing debate about the role of AI in promoting academic integrity and preventing plagiarism is critical, as institutions grapple with the implications of AI in student assessments and assignments (Wood, 2023; Yau & Chan, 2023).

AI in education represents a dynamic and rapidly evolving field that promises significant enhancements in teaching and learning experiences. Its applications are diverse, offering personalized, efficient, and engaging educational experiences across various educational levels. However, it is imperative to address the challenges and ethical considerations associated with the use of AI in education to ensure its responsible and beneficial implementation.

AI Replacing Humans

The integration of artificial intelligence (AI) and robotics into various sectors has sparked significant progress globally, enhancing convenience through diverse applications. However, this advancement raises concerns about the potential displacement of human labor by robots, particularly in the context of employment opportunities. This section delves into the speed, accuracy, and other characteristics of AI that contribute to its potential in replacing human roles in various industries.

The symbiotic relationship between AI and robotics has revolutionized industrial operations, leading to a notable shift in labor dynamics. Shaukat et al. (2020) highlight the transition from manual blue-collar jobs to the automation of white-collar positions, indicating a broad spectrum of industries affected by robotic automation. The efficiency and productivity gains are substantial, yet they come with the cost of diminishing employment opportunities. Robots, often seen as artificial companions, have taken over demanding and low-wage tasks, and their potential expansion into roles requiring emotional intelligence, such as education and caregiving, is a subject of ongoing research.

Impact on Employment

The capacity of a single robot to perform the work of numerous individuals is a testament to the efficiency of AI and robotics. Studies suggest that one robot can replace the labor of approximately 70 full-time workers, leading to a significant loss of job opportunities (Shaukat et al., 2020). This shift necessitates a reevaluation of the workforce and highlights the importance of long-term investments in understanding and adapting to robotics.

The deployment of automation and production robots, especially in countries with high labor costs, results in substantial savings in labor and product expenses (Bholat & Susskind, 2021). Robots offer advantages such as continuous operation, immunity to illness, and exemption from traditional labor constraints like strikes or annual leave. Additionally, intelligent machines excel in hazardous environments, ensuring precision and efficiency beyond human capabilities. These machines are guided by unbiased benchmarks in critical decision-making, often based on factual data and pragmatic considerations, leading to increased productivity and improved living standards.

The World Economic Forum predicts that robots could replace approximately 5.1 million office jobs within five years (Kasneci et al., 2023). This shift emphasizes the need for enhanced technological competence and skill development beyond traditional education. The impending fourth industrial revolution poses risks to various job categories, particularly those largely occupied by women, such as roles with limited growth opportunities and administrative duties.

Cover Page

INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY EDUCATIONAL RESEARCH
ISSN:2277-7881(Print); IMPACT FACTOR :10.16(2026); IC VALUE:5.16; ISI VALUE:2.286
Peer-Peer Reviewed, Refereed & Open Access International Journal - As per UGC Norms
(Fulfilled Suggests Parameters of UGC by IJMER)
Volume:15, Issue:9(1), September 2026
Scopus Review ID: A2B96D3ACF3FEA2A
Article Received: Reviewed: Accepted
Publisher: Sucharitha Publication, India
Online Copy of Article Publication Available: www.ijmer.in

The industrial sector has witnessed a significant transformation due to the implementation of automation and robots, resulting in increased efficiency and a reduction in workforce size (Abduljabbar et al., 2019). The United States, for instance, is experiencing a rise in industrial robots, and the advent of autonomous vehicles threatens around 10% of driving-related jobs in the next 25 years.

Autonomous robots, despite their potential to enhance precision and reduce errors, pose a challenge by potentially diminishing the reliance on human labor (Kasneci et al., 2023). The continuous technological advancements have led to the replacement of low-wage, low-skill jobs in various industries with automated solutions, evident in the use of robot-operated trucks in Australian mines and the automation of tasks in the financial sector.

The integration of robots and AI in professional fields may not necessarily lead to widespread unemployment but will likely result in a significant reconfiguration of work relationships. Professions such as human resources and legal roles may face challenges due to automation. The future job market is expected to emphasize social aspects, with more than 30% of career opportunities prioritizing human connection and interpersonal skills (Buckley et al., 2021).

The evolving technology landscape is reshaping how tasks are acquired and assigned, with a growing trend among organizations to utilize crowdsourcing platforms. This shift emphasizes the importance of continuous learning and skill development, adapting to the rapid pace of technological advancements and market changes (Luckin, 2017).

AI and robotics, while enhancing efficiency and productivity, present a complex landscape in terms of human employment. The shift towards automation requires a balanced approach, considering the socio-economic implications and focusing on continuous learning and skill adaptation to stay relevant in the evolving job market.

Need to Adapt Education in the AI Regime

The rapid development of artificial intelligence (AI) and its incorporation into various sectors, including education, necessitates a fundamental shift in educational strategies and policies. As AI tools like ChatGPT, Bing, and Microsoft Office's Co-Pilot become increasingly prevalent, educational systems must adapt to ensure students acquire the necessary skills and knowledge to thrive in this new environment.

The use of generative AI tools in academic settings has been a double-edged sword. On one hand, these tools offer innovative ways to assist students in their learning process. On the other hand, they pose significant challenges in terms of academic integrity and skill development. For instance, a study by Intelligent.com (2023) revealed that a substantial percentage of university students used AI tools for completing written assignments, raising concerns about academic dishonesty and the potential decline in writing and critical thinking skills (Civil, 2023; Warschauer et al., 2023). This situation has led several universities, including prominent ones like Oxford and Cambridge, to reevaluate their academic integrity policies and even ban the use of AI tools for assignments (Wood, 2023; Yau & Chan, 2023).

The need for an AI education policy is paramount, given the pervasive influence of AI across various economic sectors such as transportation, healthcare, and finance (Abduljabbar et al., 2019; Wu et al., 2022; Yu et al., 2018). An effective AI education policy would equip students with the knowledge and skills to utilize AI responsibly and effectively, thereby preparing them for future careers and societal roles (Adiguzel et al., 2023; Atlas, 2023; Luckin, 2017). Furthermore, understanding AI principles is crucial for maintaining academic integrity and navigating ethical considerations associated with AI use (Chan, 2023; Cotton et al., 2023).

The deployment of AI in education brings forth several challenges. The digital divide poses a significant threat, as AI advancements may exacerbate educational disparities between developed and less developed regions (Roll & Wylie, 2016). Privacy concerns are also heightened with AI's capability to process and infer sensitive information from data (Luckin, 2017). Moreover, the societal and ethical implications of AI, including the potential for misuse and the responsibilities of AI developers and users, need careful consideration (Bostrom, cited in “Intelligence Unleashed - An Argument for AI in Education”).

Cover Page

INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY EDUCATIONAL RESEARCH
ISSN:2277-7881(Print); IMPACT FACTOR :10.16(2026); IC VALUE:5.16; ISI VALUE:2.286
Peer-Peer Reviewed, Refereed & Open Access International Journal - As per UGC Norms
(Fulfilled Suggests Parameters of UGC by IJMER)
Volume:15, Issue:9(1), September 2026
Scopus Review ID: A2B96D3ACF3FEA2A
Article Received: Reviewed: Accepted
Publisher: Sucharitha Publication, India
Online Copy of Article Publication Available: www.ijmer.in

AI tools such ChatGPT, offer various benefits in education, from assisting in writing to providing personalized feedback. However, it is essential to focus on developing skills and insights that AI cannot replicate. Educators should emphasize critical and creative thinking, and contextual understanding in student assignments (Javaid et al., 2023). The incorporation of AI tools like ChatGPT should be balanced with human interaction and interpersonal skills development.

The integration of AI in education necessitates a comprehensive and adaptive approach. Educational policies must evolve to accommodate the changing landscape, focusing on equipping students with the skills to navigate and leverage AI technologies effectively. This adaptation includes addressing ethical considerations, bridging the digital divide, and ensuring that AI supplements rather than supplants essential human skills and interactions.

Research Methodology

The study employed an exploratory research design facilitated through in-depth semi-structured interviews. The aim was to gain nuanced insights into the impact of artificial intelligence (AI) on education from the perspectives of both academicians and industry professionals. The exploratory nature of this study was instrumental in understanding the complex and multifaceted implications of AI in the current educational and industry landscapes.

Sample

The sample for the study consisted of ten participants, comprising five academicians from various educational institutions and five industry professionals working in fields closely associated with AI. The selection of participants was intentional, targeting individuals with substantial experience and expertise in the domain of AI in education.

Data Collection

Data was collected through semi-structured interviews, which offered the flexibility to probe deeper into specific areas of interest while allowing new themes to emerge. The semi-structured interview format is supported in the literature for its ability to generate rich, qualitative data, particularly when exploring new or complex issues (Smith, 1995). Each interview lasted approximately 45 minutes to an hour, with questions tailored to elicit detailed responses on the skills, challenges, and future roles of educators and computer scientists in an AI-dominated era.

Analysis

The responses from the interviews were transcribed verbatim and subjected to thematic analysis. This qualitative analysis involved a methodical process of coding and identifying patterns within the data. Initial codes were generated by examining the frequency and salience of comments related to particular topics. These codes were then collated into potential themes and reviewed to ensure they formed a coherent pattern.

A recursive process of defining and refining the themes was undertaken, ensuring that they accurately represented the dataset. This iterative process aligns with Braun and Clarke's (2006) thematic analysis framework, which emphasizes the systematic organization and interpretation of qualitative data. The final themes were then named and described, each supported by direct quotes from respondents to retain the original context and meaning. Qualitative thematic analysis is justified as a method for identifying, analyzing, and reporting patterns within data, providing a flexible and useful research tool capable of providing a rich and detailed, yet complex account of data (Braun & Clarke, 2006).

Findings and Discussion

Academicians

In the realm of education, the advent of artificial intelligence (AI) and digital technologies has prompted a profound evolution in pedagogical landscapes and academic roles. This qualitative analysis delves into the insights and experiences of educators in India, unraveling how their roles and educational practices have transformed over the last decade. Through

Cover Page

INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY EDUCATIONAL RESEARCH
ISSN:2277-7881(Print); IMPACT FACTOR :10.16(2026); IC VALUE:5.16; ISI VALUE:2.286
Peer-Peer Reviewed, Refereed & Open Access International Journal - As per UGC Norms
(Fulfilled Suggests Parameters of UGC by IJMER)
Volume:15, Issue:9(1), September 2026
Scopus Review ID: A2B96D3ACF3FEA2A
Article Received: Reviewed: Accepted
Publisher: Sucharitha Publication, India
Online Copy of Article Publication Available: www.ijmer.in

a series of interviews, educators shared their perspectives on the integration of AI into the classroom, the shifts in curriculum necessary to prepare students for an AI-centric future, innovative pedagogical methods, the enduring value of human educators, and the challenges and ethical considerations that come with these technological advancements. The findings from these discussions underscore a multifaceted view of education's trajectory in the age of AI, highlighting the need for a dynamic approach to teaching, learning, and evaluating student progress. The educators' responses, rich with on-the-ground insights and practical innovations, paint a picture of a sector at the cusp of significant transformation, pointing towards a future where technology and human ingenuity coalesce to shape the next generation of learning.

Theme 1: Evolving Role of Educators

Educators' roles have transformed significantly in the last decade, pivoting from traditional knowledge dissemination to a more facilitative approach due to the rise of AI and digital technologies. One respondent emphasized this shift, noting that "Educators now serve not only as knowledge dispensers but also as facilitators, guiding students through personalized learning experiences enabled by technology." Another respondent highlighted the emotional engagement that technology-enabled innovations bring to the educational experience, as in the case of the 'Individual Learning Portfolio' used in a Delhi government school, which created a "huge amount of emotional engagement for parents."

Theme 2: Curriculum Adaptation for AI

Preparing students for an AI-dominated world requires curricular adjustments focusing on digital literacy, coding skills, and an understanding of AI and data analytics. According to one educator, it's about "Integrating interdisciplinary learning, where technology and AI are blended with traditional subjects." Another respondent suggests gamification as a potent technique, explaining that "With the help of teams, guidelines, expectations, competition, scoreboards, and incentives, educators may create a fun gamified learning environment."

Theme 3: Pedagogical Innovations in AI Education

New pedagogical methods, including Project-Based Learning (PBL), have been particularly effective in teaching AI and related fields. One educator shared, "Project-based learning and problem-based immersive learning have proven effective in teaching AI and related fields," while another respondent concurred, saying, "Project-based learning is the way forward."

Theme 4: Future of Human Educators Amidst AI

The consensus among educators is that despite AI's growing capabilities, the human element remains irreplaceable. One interviewee envisioned that educators would "shift towards becoming facilitators and mentors," while another asserted that human instructors would "continue to play an essential role in the learning process."

Theme 5: Challenges of AI Integration

Challenges in integrating AI tools in the classroom include equitable access to technology, overcoming resistance, and ensuring data privacy. One educator pointed out, "Educators face challenges like ensuring equitable access to technology," while another mentioned the difficulty in "seamlessly blending technology with traditional teaching methods."

Theme 6: AI in Grading and Assessment

AI's role in grading and assessing student work is viewed with cautious optimism. An educator mentioned the potential for AI to "reduce educators' workload and provide timely feedback." However, there are concerns about AI's "potential lack of understanding of nuanced answers and biases in algorithms."

Cover Page

INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY EDUCATIONAL RESEARCH
ISSN:2277-7881(Print); IMPACT FACTOR :10.16(2026); IC VALUE:5.16; ISI VALUE:2.286
Peer-Peer Reviewed, Refereed & Open Access International Journal - As per UGC Norms
(Fulfilled Suggests Parameters of UGC by IJMER)
Volume:15, Issue:9(1), September 2026
Scopus Review ID: A2B96D3ACF3FEA2A
Article Received: Reviewed: Accepted
Publisher: Sucharitha Publication, India
Online Copy of Article Publication Available: www.ijmer.in

Theme 7: Evolution of Assessments with AI

Educators believe that traditional assessments should evolve alongside AI advancements. One respondent suggested that assessments should now "evaluate 21st-century skills such as creativity, critical thinking, and problem-solving," and another advocated for "adaptive testing, which adjusts difficulty based on student performance."

Theme 8: Ethical Considerations and AI

Preparing students for ethical considerations around AI and technology is a priority. One educator stressed the importance of "Building a mindset that prioritises ethical considerations," while another focused on the curriculum by "Incorporating ethics into AI curriculum, discussing real-world situations."

The qualitative analysis reveals a nuanced understanding among educators of the opportunities and challenges posed by AI in education. There is a clear recognition of the need for adaptability in teaching methods, curriculum development, assessment strategies, and ethical education to prepare students for a future intertwined with AI.

Industry Professionals

In an age where artificial intelligence (AI) is reshaping the contours of industries, understanding the perspectives of industry professionals on the implications of AI in education is pivotal. This qualitative analysis synthesizes insights from interviews with industry experts who discuss the integration of AI within the educational framework that prepares the next generation of computer scientists. From the essential skills that recent graduates bring to the AI-driven marketplace, to the competencies that are lacking, and the evolving role of computer scientists—the responses from the professionals provide a window into the expectations and realities of an AI-infused future. They also reflect on the balance between specialized AI knowledge and interdisciplinary learning, the current state of ethics in AI education, the AI tools that should become part of the educational canon, and how educational institutions can align with industry needs. Furthermore, they explore the interplay of human intuition and AI in decision-making processes. These findings, grouped thematically and interspersed with direct quotations from the respondents, offer a narrative that captures the confluence of education and industry in the era of artificial intelligence.

Theme 1: Valuable Skills in AI-Driven Landscape

Industry professionals appreciate graduates who possess a robust problem-solving aptitude and a profound understanding of AI fundamentals. One respondent emphasized, “In an AI driven landscape, problem solving skills combined with a knowledge of using AI to solve some of those problems will help graduates become more successful as they begin their career,” while another highlighted the need for deep conceptual knowledge, “In-depth knowledge of the underlying concepts, not just a cursory ability to write code, is valuable.”

Theme 2: Skills Gap in Recent Graduates

The industry identifies a gap in career and communication skills among recent graduates. As one expert puts it, “Career skills are critical to build early in your career because this is what will keep moving you forward.” Another professional points out the need for effective communication, “Communication skills – the ability to understand the needs by asking meaningful questions and explaining the technology in simple terms to help non-technical business partners.”

Theme 3: The Evolving Role of Computer Scientists

The next decade is expected to see computer scientists engaging more in the development and application of AI. “Some will enhance and build AI capabilities, and some will use AI capabilities to build applications,” one respondent said. Another predicts a shift in business dynamics, “Computer scientists will be designing new business models that will fundamentally change traditional businesses.”

Cover Page

INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY EDUCATIONAL RESEARCH
ISSN:2277-7881(Print); IMPACT FACTOR :10.16(2026); IC VALUE:5.16; ISI VALUE:2.286
Peer-Peer Reviewed, Refereed & Open Access International Journal - As per UGC Norms
(Fulfilled Suggests Parameters of UGC by IJMER)
Volume:15, Issue:9(1), September 2026
Scopus Review ID: A2B96D3ACF3FEA2A
Article Received: Reviewed: Accepted
Publisher: Sucharitha Publication, India
Online Copy of Article Publication Available: www.ijmer.in

Theme 4: Specialized vs. Interdisciplinary Knowledge

There is a debate on the balance between AI specialization and interdisciplinary knowledge. One respondent believes that "the more general interdisciplinary understanding is more than enough" for creating AI applications. Another emphasizes a crossroads, "Aspiring computer scientists must make a choice between innovating the technology or utilizing the technology."

Theme 5: Addressing Ethics in AI Education

Respondents feel that ethics in AI is inadequately addressed in the current education system. One expert remarked, "Ethics will go far beyond in terms of detecting gaps while building curriculum," while another insists on the comprehensive inclusion of ethics, "Every facet of technology education must incorporate ethical considerations."

Theme 6: Familiarity with AI Tools and Platforms

Industry professionals wish graduates were more familiar with certain AI tools and platforms. "Students would do well to familiarize themselves with Prompts and learn how to apply LLMs in a variety of contexts," advises one, while another acknowledges the challenge of keeping pace with evolving tools, "Tools and platforms are rapidly evolving, and keeping up with those can be a challenge."

Theme 7: Aligning Education with Industry Needs

To better meet industry requirements, educational institutions are encouraged to foster continuous learning and practical skills. "Promote lifelong learning by encouraging graduates to stay updated with AI trends," one respondent suggests. Another underscores the importance of adaptability, "The ability to quickly and effectively learn will allow computer scientists to remain relevant as technologies and businesses evolve."

Theme 8: Human Intuition vs. AI Decision-Making

The consensus is that human intuition will complement rather than compete with AI. "The future implies a collaborative paradigm wherein AI supplements human decision-making," one professional predicts. Another opines on the need for human creativity, "Human intuition, as well as imagination, will need to evolve substantially."

These insights gleaned from industry professionals underscore the necessity for an educational paradigm that is responsive, dynamic, and forward-thinking, adequately preparing students for the nuanced demands of an AI-oriented professional landscape.

Conclusion

This research paper has explored the perspectives of academicians and industry professionals on the influence of artificial intelligence (AI) on education. The findings reveal a significant shift towards the integration of AI in educational curricula and pedagogy, aligning with the demands of the industry for graduates equipped with AI-centric skills. These observations are consistent with other studies indicating the transformative potential of AI .

Comparatively, our findings resonate with the broader discourse within AI and education literature. The emphasis on problem-solving skills and interdisciplinary knowledge aligns with the current educational framework's shift towards creating a more adaptable and tech-savvy workforce. Similarly, the call for a balance between human intuition and AI decision-making echoes the concerns of ethical considerations in AI, a topic that is being increasingly woven into the fabric of educational systems .

Cover Page

INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY EDUCATIONAL RESEARCH
ISSN:2277-7881(Print); IMPACT FACTOR :10.16(2026); IC VALUE:5.16; ISI VALUE:2.286
Peer-Peer Reviewed, Refereed & Open Access International Journal - As per UGC Norms
(Fulfilled Suggests Parameters of UGC by IJMER)
Volume:15, Issue:9(1), September 2026
Scopus Review ID: A2B96D3ACF3FEA2A
Article Received: Reviewed: Accepted
Publisher: Sucharitha Publication, India
Online Copy of Article Publication Available: www.ijmer.in

However, this study is not without limitations. The sample size, while offering depth, may not capture the full breadth of perspectives within the field. Additionally, the semi-structured interview format, while allowing for rich data collection, may also introduce interviewer biases and limit the comparability of responses.

Theoretically, this study contributes to the understanding of the evolving role of educators in the age of AI, offering insights into the necessary balance between AI expertise and broader educational competencies. Practically, it suggests that educational institutions must remain agile, continuously updating curricula to match the rapid development of AI tools and platforms. Some of the specific implications for educators and students are as under:

Educators should:

- Embrace a facilitative role that leverages AI for personalized learning while maintaining the human-centric aspects of education that AI cannot replicate.
- Update curricular content to include AI literacy, ensuring students understand both the practical applications and the theoretical underpinnings of AI technologies.
- Incorporate ethical considerations into the curriculum to prepare students for responsible AI usage, aligning with Civil's (2023) concerns about AI's potential to hinder critical thinking.
- Facilitate hands-on experience with current AI tools and platforms, preparing students for the practical demands of the industry as suggested by respondents' call for familiarity with evolving technologies.
- Develop continuous professional development programs to stay abreast of AI advancements and integrate these insights into teaching methodologies.

Students should:

- Seek interdisciplinary knowledge that allows for flexibility in applying AI across various domains, as recommended by industry professionals who value a balance between AI specialization and broader knowledge.
- Engage in lifelong learning practices to adapt to the rapid evolution of AI tools and platforms.
- Actively participate in discussions and projects that address ethical considerations in AI, preparing for the complexities of real-world AI deployment (Chan, 2023; Cotton et al., 2023).

Future research should aim to expand the diversity of participants, including a broader international representation to understand the global impact of AI on education. Longitudinal studies could also provide insight into the evolution of AI's role in education over time. Further exploration into the specific AI tools and platforms that are becoming industry standards could help refine educational programs to better prepare students for the workforce.

References

1. Abduljabbar, R., Dia, H., Liyanage, S., & Bagloee, S. A. (2019). Applications of artificial intelligence in transport: An overview. *Sustainability, 11*(1), 189. https://doi.org/10.3390/su11010189
2. Adiguzel, T., Kaya, M. H., & Cansu, F. K. (2023). Revolutionizing education with AI: Exploring the transformative potential of ChatGPT. *Contemporary Educational Technology, 15*(3), ep429. https://doi.org/10.30935/cedtech/13152
3. Aoun, J. E. (2017). Robot-proof: Higher education in the age of artificial intelligence. *The MIT Press.*
4. Atlas, S. (2023). ChatGPT for higher education and professional development: A guide to conversational AI. https://digitalcommons.uri.edu/cba_facpubs/548
5. Bholat, D., & Susskind, D. (2021). The assessment: Artificial intelligence and financial services. *Oxford Review of Economic Policy, 37*(3), 417–434. https://doi.org/10.1093/oxrep/grab015
6. Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77-101. 10.1191/1478088706qp063oa.
7. Buckley, R. P., Zetzsche, D. A., Arner, D. W., & Tang, B. W. (2021). Regulating artificial intelligence in finance: Putting the human in the loop. *The Sydney Law Review, 43*(1), 43–81.

Cover Page

INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY EDUCATIONAL RESEARCH
ISSN:2277-7881(Print); IMPACT FACTOR :10.16(2026); IC VALUE:5.16; ISI VALUE:2.286
Peer-Peer Reviewed, Refereed & Open Access International Journal - As per UGC Norms
(Fulfilled Suggests Parameters of UGC by IJMER)
Volume:15, Issue:9(1), September 2026
Scopus Review ID: A2B96D3ACF3FEA2A
Article Received: Reviewed: Accepted
Publisher: Sucharitha Publication, India
Online Copy of Article Publication Available: www.ijmer.in

8. Cavendish, C. (2023). ChatGPT will force school exams out of the dark ages. *Financial Times.* https://www.ft.com/content/41243091-d8d7-4b74-9ad1-5341c16c869f
9. Chan, C.K.Y. (2023). A comprehensive AI policy education framework for university teaching and learning. *International Journal of Educational Technology in Higher Education, 20,* 38. https://doi.org/10.1186/s41239-023-00408-3
10. Civil, B. (2023, March 16). ChatGPT can hinder students' critical thinking skills: Artificial intelligence is changing how students learn to write. *The Queen's Journal.* https://www.queensjournal.ca/story/2023-03-16/opinions/chatgpt-can-hinder-students-critical-thinking-skills
11. Cotton, D. R. E., Cotton, P. A., & Shipway, J. R. (2023). Chatting and cheating: Ensuring academic integrity in the era of ChatGPT. *Innovations in Education and Teaching International.* https://doi.org/10.1080/14703297.2023.2190148
12. Intelligent.com. (2023, January 23). Nearly 1 in 3 College Students Have Used ChatGPT on Written Assignments. https://www.intelligent.com/nearly-1-in-3-college-students-have-used-chatgpt-on-written-assignments/
13. Javaid, M., Haleem, A., Singh, R. P., Khan, S., & Khan, I. H. (2023). Unlocking the opportunities through ChatGPT tool towards ameliorating the education system. *BenchCouncil Transactions on Benchmarks, Standards and Evaluations*, *3*(2), 100115. https://doi.org/10.1016/j.tbench.2023.100115
14. Kasneci, E., Seßler, K., Küchemann, S., Bannert, M., Dementieva, D., Fischer, F., Gasser, U., & Kasneci, G. (2023). ChatGPT for good? On opportunities and challenges of large language models for education. *Learning and Individual Differences,* 103, 102274.
15. Luckin, R. (2017). Towards artificial intelligence-based assessment systems. *Nature Human Behaviour,* 1, 0028. https://doi.org/10.1038/s41562-016-0028
16. Luckin, Rosemary & Holmes, Wayne. (2016). Intelligence Unleashed: An argument for AI in Education. Pearson, London, UK.
17. Olafare, F. O. (2023). Artificial intelligence in education: challenges and way forward. *Nigerian Online Journal of Educational Sciences and Technology (NOJEST), 5*(1), 1-8
18. Roll, I., & Wylie, R. (2016). Evolution and Revolution in Artificial Intelligence in Education. 1111111111111*International Journal of Artificial Intelligence in Education,* 26, 582–599. https://doi.org/10.1007/s40593-016-0110-3
19. Shaukat, K., Iqbal, F., Alam, T. M., Aujla, G. K., Devnath, L., Khan, A. G., Iqbal, R., Shahzadi, I., & Rubab, A. (2020). The Impact of Artificial intelligence and Robotics on the Future Employment Opportunities. *Trends in Computer Science and Information Technology*, 050–054. https://doi.org/10.17352/tcsit.000022
20. Smith, J. A. (1995). Semi-structured interviewing and qualitative analysis. *Rethinking Methods in Psychology*, 10-26. https://doi.org/10.4135/9781446221792.n2
21. Warschauer, M., Tseng, W., Yim, S., Webster, T., Jacob, S., Du, Q, & Tate, T. (2023). The affordances and contradictions of AI-generated text for second language writers. https://doi.org/10.2139/ssrn.4404380
22. Wood, P. (2023, February 28). Oxford and Cambridge ban AI language tool GPT-3 over fears of plagiarism. *inews.co.uk.* https://inews.co.uk/news/oxford-cambridge-ban-chatgpt-plagiarism-universities-2178391
23. Wu, J., Wang, X., Dang, Y., & Lv, Z. (2022). Digital twins and artificial intelligence in transportation infrastructure: Classification, application, and future research directions. *Computers and Electrical Engineering, 101*, 107983. https://doi.org/10.1016/j.compeleceng.2022.107983
24. Yau, C., & Chan, K. (2023, February 17). University of Hong Kong temporarily bans students from using ChatGPT, other AI-based tools in coursework. *South China Morning Post.* https://www.scmp.com/news/hong-kong/education/article/3210650/university-hong-kong-temporarily-bans-students-using-chatgpt-other-ai-based-tools-coursework
25. Yu, K.-H., Beam, A. L., & Kohane, I. S. (2018). Artificial intelligence in healthcare. *Nature Biomedical Engineering,* 2, 719–731. https://doi.org/10.1038/s41551-018-0305-z