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AI - ENABLED PERSONALIZED LEARNING IN HIGHER EDUCATION: NAVIGATING THE INTERSECTION OF ALGORITHMIC EFFICIENCY AND HUMAN - CENTRIC PEDAGOGY IN THE 2026 GLOBAL LANDSCAPE

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Abstract

The landscape of global higher education is currently traversing a period of profound structural and epistemological metamorphosis mediated by Artificial Intelligence (AI). This research investigates the integration of advanced generative architectures, specifically Retrieval-Augmented Generation (RAG) and neuroadaptive learning systems, into university frameworks (Thesen & Park, 2025; Upadhyay et al., 2026). Using the philosophical construct of Kuvempu's *Vishwa Manava* (Universal Human), the paper evaluates how algorithmic personalization interacts with indigenous pedagogical traditions such as the *Guru-Shishya parampara* (Puttappa, 1982; Sil & Dutta, 2025). Key thematic inquiries include linguistic democratization through India's BHASHINI infrastructure, the socio-economic risks of the rural-urban digital divide, and the erosion of the human educator's professional identity (Nag, 2026; Popenici, 2023). The report advocates for a "Critical Alliance" framework that prioritizes human cognitive agency and ethical reflection over deterministic efficiency (Ramos-Benitez et al., 2026). Findings indicate that while AI offers scalable individualized support, its responsible deployment requires equitable infrastructure, robust governance, and a pedagogical commitment to intellectual struggle as a core component of deep learning (World Bank, 2025; Hamamra et al., 2025).

Keywords: Artificial Intelligence, Higher Education, Personalized Learning, Retrieval-Augmented

Generation (RAG), Neuroadaptive Learning, National Education Policy 2020, Vishwa Manava, Karnataka State Budget 2026-27.

INTRODUCTION

The landscape of global higher education is currently traversing a period of profound structural and epistemological metamorphosis. Historically, university education has been defined by a standardized, rigid pedagogical model designed for mass instruction—a legacy of the industrial era that prioritized uniform delivery over individual cognitive needs. However, as of 2026, this paradigm is being rapidly dismantled and replaced by the mediation of advanced Artificial Intelligence (AI) architectures (Digital Education Council, 2024). Generative Artificial Intelligence (GenAI), Large Language Models (LLMs), and Intelligent Tutoring Systems (ITS) have transitioned from the periphery of computer science to become central, ubiquitous participants in the daily cognitive routines of the academic community (FICCI-EY-P, 2025). The velocity of this integration is staggering; empirical data from 2024 indicate that approximately 86% of students utilize AI tools for core academic tasks, ranging from the summarization of dense scholarly readings to the resolution of complex computational problems, with over 54% engaging with these systems on a weekly basis (Digital Education Council, 2024).

This technological acceleration is particularly acute in the Indian context, where it aligns with the ambitious objectives of the National Education Policy (NEP) 2020. This policy framework explicitly foregrounds technology as the primary lever for rectifying historical deficits in access, quality, and equity across a system comprising more than 40 million students (Ministry of Education, 2020). However, the rapid mainstreaming of AI has exposed a critical gap in institutional governance. While students have adopted these tools with speed, approximately 43% of Indian Higher Education Institutions (HEIs) have yet to formalize AI policies, leaving a significant regulatory void (FICCI-EY-P, 2025). The current discourse frequently oscillates between a techno-utopian vision of democratic access to global knowledge and a dystopian perspective that warns of pervasive algorithmic bias, cognitive deskilling, and the erosion of the humanistic foundations of learning (Popenici, 2023). Moving beyond these binaries requires a nuanced analysis of how AI can be cultivated as a responsible, inclusive, and contextually grounded ecosystem that serves a diverse socio-economic fabric (Sabzalieva & Valentini, 2023).

Table 1: Market Projections and Behavioral Integration of AI in Global Education (2025-2026)

AI Adoption and Market Trends (2025-2026)	**Statistical Value**	**Source**
Global AI Education Market Valuation (2025)	$7.57 Billion USD	(QuadC, 2025)
Projected Global AI Education Market (2034)	$112 Billion USD	(QuadC, 2025)
Generative AI Adoption Rate in Education	86%	(Digital Education Council, 2024)
Students Using AI for Academic Tasks Weekly	54%	(Digital Education Council, 2024)
Institutions with Formal AI Policies	57%	(FICCI-EY-P, 2025)

METHODOLOGY

The study adopts a qualitative meta-synthesis approach, integrating interdisciplinary data from technical, pedagogical, and philosophical domains (Crompton & Burke, 2023). This research employs a theoretical and documentary review design, analyzing a curated corpus of 155 peer-reviewed empirical studies and policy frameworks published between 2015 and 2026 (Merino-Campos, 2025). The search strategy targeted high-impact databases, including **Springer Nature**, **IEEE Xplore**, **arXiv**, and **MDPI**, focusing on keywords such as "Retrieval-Augmented Generation," "neuroadaptive learning," and "algorithmic bias in Indian HEIs" (Abdelmagied et al., 2025; Granata et al., 2026). Data sources include governmental records such as the National Education Policy 2020 and the Karnataka State Budget 2026-27 (Siddaramaiah, 2026). Institutional pilots from leading universities, such as Arizona State University and Dartmouth College, were analyzed to establish "Human-in-the-Loop" best practices (Thesen & Park, 2025; ASU, 2025).

THE PHILOSOPHICAL IMPERATIVE: KUVEMPU'S VISHWA MANAVA IN THE ALGORITHMIC AGE

To genuinely comprehend the implications of introducing artificial intelligence into the pedagogical framework, one must contextualize technology within the indigenous philosophical traditions that have defined approaches to learning. The Indian pedagogical ethos is deeply anchored in the *Guru-Shishya parampara*, a sacred, holistic bond that transcends the mere transactional transfer of data (Sil & Dutta, 2025). Within this framework, the educator is conceptualized as a moral, ethical, and spiritual guide whose primary function is to trigger holistic human transformation. This relationship demands profound empathy and intuitive understanding—qualities that fiercely resist algorithmic codification (Sil & Dutta, 2025).

When a data-driven entity like an AI is introduced into this framework, it forces a radical re-evaluation of the purpose of higher education. Thinkers such as Jiddu Krishnamurti and Rabindranath Tagore consistently warned against reducing education to a mechanized process of rote skill acquisition (Krishnamurti, 1974; Tagore, 1921). Tagore's visionary concept of open learning prioritized creative expression and harmony with the natural world, while Krishnamurti relentlessly emphasized that the true function of education is the cultivation of deep self-knowledge and total liberation of the mind from societal conditioning (Tagore, 1921). They argued that true intellectual autonomy requires a student to navigate uncertainty and engage with the unexpected—profound human experiences that generative algorithms naturally seek to eliminate (Ramos-Benitez et al., 2026).

Perhaps the most potent philosophical lens through which to evaluate AI-enabled learning is the concept of the *Vishwa Manava*, or "The Universal Man," articulated by the eminent Kannada poet Kuvempu (Puttappa, 1982). Kuvempu famously observed that every child is born as a universal man, but social constructs—caste, creed, religion, and race—gradually turn the individual into a "petty man" (Gowda, 2015). He argued that the primary function of education should be to restore the individual to their original status as a universal being (Puttappa, 1982). This philosophical construct presents a formidable metric for evaluating AI: does technology elevate the student toward the boundless ideal of the *Vishwa Manava*, or does it systematically reduce the student back to the "petty man" through algorithmic bias and the reinforcement of historical inequalities? (David et al., 2026; Mehrabi et al., 2021).

ARCHITECTURES OF COGNITIVE AUGMENTATION: THE MECHANICS OF PERSONALIZED LEARNING

The transition from traditional, cohort-based instruction to AI-enabled personalized learning represents a fundamental reconfiguration of the educational architecture itself. Artificial intelligence disrupts this paradigm through adaptive learning systems and Intelligent Tutoring Systems (ITS) that utilize machine learning algorithms to silently monitor student interaction in real-time (Chen et al., 2026). These platforms analyze thousands of granular data points—ranging from the exact seconds taken to answer a multiple-choice

question to the specific types of syntactical errors—to construct a dynamic cognitive profile of the learner (Cao et al., 2020).

Qualitative studies demonstrate that this level of adaptability is highly valued, as it allows students to shift away from rote memorization toward conceptual clarity because the system provides instant, individualized feedback (Ayyoub et al., 2025). This remediation loop keeps students operating constantly within their Zone of Proximal Development, boosting intrinsic motivation (Alshammari, 2025). Furthermore, modern ITS systems incorporate advanced predictive analytics to identify "at-risk" students long before they fail or drop out (Abu Shokhedim et al., 2025). By flagging subtle changes in engagement metrics, such as login frequency or hesitation times, AI empowers human educators to intervene preventatively rather than reactively (Tariq, 2025).

Table 2: Technical Mechanisms and Pedagogical Outcomes of Modern AI Architectures

Comparison of AI Personalization Models	**Mechanism**	**Primary Outcome**	**Source**
Retrieval-Augmented Generation (RAG)	Anchors LLMs to curated course databases	90%+ reduction in hallucinations; high trust	(Thesen & Park, 2025)
Neuroadaptive Learning	Real-time monitoring of cognitive/emotional states	Targeted support for neurodiverse learners	(Zaghi, 2025)
Predictive Analytics (LSTM)	Forecasts at-risk students via engagement history	12% improvement in student retention rates	(Abu Shokhedim et al., 2025)
Optimization Algorithms (PSO/GA)	Tailors resource sequencing based on mastery	22% increase in learner satisfaction	(Chen et al., 2026)

TECHNICAL BREAKTHROUGHS: RAG AND NEUROADAPTIVE ECOSYSTEMS

The pursuit of personalized instruction in 2026 is underpinned by two primary technical breakthroughs: Retrieval-Augmented Generation (RAG) and Neuroadaptive learning models (Thesen & Park, 2025). RAG addresses the "hallucination" problem of traditional LLMs by anchoring the AI's responses to a curated, vetted database of course-specific materials, such as textbooks, lecture slides, and peer-reviewed journals (Upadhyay et al., 2026).

A landmark 2025 study at Dartmouth College's medical school demonstrated the effectiveness of the "NeuroBot TA," a RAG-powered assistant (Thesen & Park, 2025). By restricting the AI's data source to established medical texts, researchers achieved high levels of student trust, with over 25% of participants citing reliability as the bot's most significant feature. Simultaneously, the University of Connecticut (UConn) has pioneered "Neuroadaptive Learning Ecosystems" funded by the National Science Foundation (NSF). These systems utilize AI to monitor and respond to a student's cognitive and emotional states in real-time, providing targeted interventions for neurodiverse learners—including those with ADHD, dyslexia, and autism (Zaghi, 2025). This model represents a shift from "accommodation" to "asset-based" instruction (Zaghi, 2025).

LINGUISTIC DEMOCRATIZATION: BREAKING THE ENGLISH HEGEMONY

In the Indian context, the most significant barrier to inclusive higher education has historically been the dominance of the English language, particularly in STEM and professional disciplines (Pawar, 2023). By 2026, the Government of India has addressed this systemic inequality through the development of the BHASHINI National Language Infrastructure—a Digital Public Infrastructure (DPI) aimed at enabling participation for 1.4 billion people (Nag, 2026).

A critical expansion of this infrastructure occurred in February 2026 with the launch of VoicERA at the India AI Impact Summit (MeitY, 2026). Developed by the Digital India BHASHINI Division, VoicERA is an open-source, end-to-end Voice AI stack. It establishes a "national execution layer" for multilingual voice AI, allowing students to interact verbally with educational platforms in their native tongues (Nag, 2026). In Karnataka, the All India Council for Technical Education (AICTE) has initiated projects focused on the translation of technical course materials into Kannada, leveraging sophisticated AI cross-lingual semantic-similarity systems (AICTE, 2025). Furthermore, the deployment of "Shiksha Copilot" in Karnataka demonstrates the collaborative workflow between human curators and AI to create bilingual lesson plans (Nag, 2026).

THE CHASM OF ACCESS: SOCIO-ECONOMIC DISPARITIES AND THE RURAL-URBAN DIVIDE

The sweeps of AI optimism are predicated upon a fundamental assumption of universal access to high-speed internet and digital devices (Sabzalieva & Valentini, 2023). In the Indian context, treating this as a given ignores stark socio-economic realities (David et al., 2026). The deployment of advanced AI frequently

exacerbates existing disparities, functioning not as a great equalizer, but as a powerful amplifier of pre-existing privilege (Mehrabi et al., 2021). Rural regions like Malnad in Karnataka face chronic issues with poor connectivity and a lack of access to personal laptops or tablets (Sharma et al., 2024).

Table 3: Socio-Economic and Infrastructural Indicators of Learning Poverty in India

Indicator of Digital Disparity	**Rural Regions**	**Urban Regions**	**Pedagogical Implications for AI Adoption**
Secondary School Internet Access	~41%	~69%	Lack of connectivity for synchronous AI tutoring.
Functional Computer Availability	< 50%	< 50%	national average barrier for running heavy local LLMs.
Regular Internet Usage (Individuals)	~31%	~67%	High-bandwidth usage remains critically low.
Digital Literacy Rates	25%	61%	affects student ability to prompt complex AI interfaces.
Electricity Reliability	Low / Erratic	High / Stable	Power outages disrupt continuous interaction.

THE EROSION OF THE EDUCATOR: PROFESSIONAL IDENTITY AND PEDAGOGICAL FRICTION

The integration of artificial intelligence is not merely altering student learning; it is fundamentally disrupting the professional identity and well-being of the human educator (Popenici, 2023). While framed as a benevolent "co-pilot," the lived reality of teacher-AI collaboration is fraught with anxiety (Hamamra et al., 2025). A multi-disciplinary study found that 89% of educators reported a decline in their own scientific writing and critical thinking capabilities as they outsourced academic tasks to LLMs (Hamamra et al., 2025). This decline is compounded by "Pedagogical Erosion," as educators increasingly lean on AI to generate feedback, diminishing the authentic interaction between teacher and student (Sil & Dutta, 2025).

Table 4: Classification of AI-Driven Assistive Solutions for Inclusive Learning

AI Technology Category	Educational Application	Example Tools & Initiatives
Advanced TTS & STT	Converts written content to audio and vice versa	Voice Fusion AI (assisting with SLDs)
Automated Captioning	Real-time captions for video lectures	Zoom Auto-Captioning, Rev.ai
Predictive Text	Reduces keystroke fatigue and cognitive load	Grammarly, MS Word Predictive Text
Dynamic Format Conversion	Translates inaccessible PDFs into Braille/audio	Ally for Blackboard, SensusAccess
SLD Detection	Screening for dyslexia, dyscalculia, autism	Readabled, ScreenPlay

THE AFFECTIVE DIMENSION: COGNITIVE DEBT AND THE ILLUSION OF SIMULATED EMPATHY

Cognitive science dictates that true, lasting learning is born out of friction, deep ambiguity, and prolonged intellectual struggle (Krishnamurti, 1974). When university students utilize AI to summarize complex philosophical texts or debug code instantly, they bypass the reflective neurological processes necessary for deep cognitive encoding, accumulating "Cognitive Debt" (Ramos-Benitez et al., 2026). By offloading analytical thinking to an algorithm, students accumulate a long-term deficit in executive function and independent inquiry (Popenici, 2023). Furthermore, relying on "Affective Computing" to manage student well-being risks creating an alienated environment where human struggle is treated merely as a data point to be optimized (Zaghi, 2025).

POLICY, GOVERNANCE, AND THE KARNATAKA 2026-2027 FRAMEWORK

The yawning gap between the rapid proliferation of AI and the slow evolution of institutional governance is a critical vulnerability (Sabzalieva & Valentini, 2023). The Government of Karnataka, positioning itself as a leader in digital innovation, unveiled an AI-centric roadmap in its 2026-2027 state budget (Siddaramaiah, 2026).

Table 5: Fiscal Allocations and Strategic Targets for AI Reforms in Karnataka (2026-2027)

Initiative / Legislative Program	**Target Demographic**	**Core Objective & Mechanism**
Personalized AI Digital Tutor	1.28 million students	Developed with IIT Dharwad (₹5 crore) (Siddaramaiah, 2026).
Mandatory AI & Cloud Curriculum	All UG/PG students	mandatory courses to bridge industry skills gap (AICTE, 2025).
Modern AI Data Labs Expansion	50 Government Colleges	₹10 crore grant for localized infrastructure (MeitY, 2026).
BRAINz Campus (Robotics & AI)	Advanced researchers	Innovation Zone established with IISc and ISRO (Nag, 2026).
AI Facial Recognition Attendance	Statewide deployment	Biometric tracking for accountability (MeitY, 2026).
Social Media Ban (Under 16)	Statewide minors	Coupled with mental health counselors (Siddaramaiah, 2026).

EPISTEMOLOGICAL TRANSPARENCY: ACADEMIC INTEGRITY AND APA 7TH EDITION GUIDELINES

Academic integrity in 2026 is built on "Ontological Transparency," ensuring that readers know where human cognition ends and machine generation begins (Ramos-Benitez et al., 2026). In this context, the updated American Psychological Association (APA) 7th Edition guidelines (revised late 2025) serve as a vital blueprint (APA, 2025). Under strict APA protocols, an AI system cannot be listed as an author or co-author. Authors are required to provide the name of the AI company as the author, the query date, and a direct URL to shared chat transcripts (APA, 2025; Sabzalieva & Valentini, 2023).

STATISTICAL INSIGHTS INTO LEARNING OUTCOMES

Large-scale empirical studies in 2025 demonstrate that AI-based platforms boost student performance by 15-25% (Chen et al., 2026). SEM results from a study of 450 students showed a relationship between AI personalization and motivation with a path coefficient of $\beta=0.42$ (Chen et al., 2026). Furthermore, adaptive math platforms reported 25% "grade lifts" and a 40% uptake in participation compared to traditional courses (Chen et al., 2026).

Table 6: Empirical Findings from Leading Institutional AI Integration Pilots (2024-2025)

University	AI Initiative	Primary Outcomes (2024-2025)	Source
Dartmouth College	RAG-powered NeuroBot	Increased trust; 24/7 support for medical students	(Thesen & Park, 2025)
Arizona State Univ.	ChatGPT Enterprise	200+ projects; improved feedback in writing	(ASU, 2025)
Univ. of Connecticut	AI4ALL / Neuroadaptive	500 students enrolled; focus on neurodiversity	(Zaghi, 2025)
IIT Dharwad	AI-based Digital Tutor	Supported 1.2 million students (Karnataka Budget)	(Siddaramaiah, 2026)

CONCLUSION: TOWARD A PEDAGOGY OF CRITICAL ALLIANCE

The integration of Artificial Intelligence into global and Indian higher education is an irreversible paradigm shift possessing the profound capacity to radically democratize knowledge. Yet, the data demonstrate that an uncritical embrace threatens to erode the professional identity of the educator and inflict long-term cognitive debt upon students. Navigating this terrain requires the adoption of a "Critical Alliance" framework, where AI is utilized strictly to augment—never to replace—human cognitive agency (Ramos-Benitez et al., 2026). Ultimately, if the educational project is to genuinely honor the philosophy of Kuvempu's *Vishwa Manava*—the Universal Man who transcends the petty conditioning of his era—it must ensure that technology remains a subordinate servant to the human spirit (Puttappa, 1982).

REFERENCES

1. Abdelmagied, M., Chatti, M. A., Joarder, S., Ain, Q. U., & Alatrash, R. (2025). *Leveraging Graph Retrieval-Augmented Generation to Support Learners' Understanding of Knowledge Concepts in MOOCs*. arXiv:2505.10074.
2. Abu Shokhedim, K., et al. (2025). *Predictive Analytics in Student Retention: A Meta-Analysis*. Journal of Higher Education Research.
3. AICTE. (2025). *Declaration of 2025 as the Year of Artificial Intelligence*. Ministry of Education, Government of India.
4. Alshammari, S. (2025). *Affective Conditions Supporting Learning through AI Intervention*. International Journal of Instruction, 19(1).
5. American Psychological Association [APA]. (2025). *Citing Generative AI in APA Style: Revised 2025 Guidelines*. https://apastyle.apa.org/blog/cite-generative-ai-references
6. Arizona State University. (2025). *ASU and OpenAI Expand Collaboration: Scaling AI for Student Success*. https://tech.asu.edu/features/asu-and-openai-expand-collaboration-scaling-ai
7. Ayyoub, A., et al. (2025). *Between Promise and Precarity: Palestinian University Educators' Experiences with AI Integration*. Interactive Learning Environments.
8. Chen, X., Fu, M., & Li, H. (2026). *Enhancing Higher Education Through AI-Driven Personalized Adaptive Learning*. International Journal of Instruction, 19(1).
9. Crompton, H., & Burke, D. (2023). *Artificial intelligence in higher education: the state of the field*. International Journal of Educational Technology in Higher Education, 20(22).
10. David, D., Rajeshwari, B., & Timhna, S. (2026). *Algorithmic Bias and Discrimination in India: A Looming Crisis*. Journal of Development Policy and Practice, 11(1).
11. Digital Education Council. (2024). *Global AI Education Survey 2024*.
12. FICCI-EY-P. (2025). *AI Adoption Survey in Indian Higher Education Institutions*.
13. Gowda (2015). *The Idea of the Universal Human: Kuvempu on Self, Society, and Politics*. Harvard Mittal South Asia Institute.

14. Granata, F., Poggi, F., & Mongiovì, M. (2026). *Enhancing Retrieval-Augmented Generation with Entity Linking for Educational Platforms*. arXiv:2512.05967.
15. Hamamra, B., Khlaif, Z. N., & Mayaleh, A. (2025). *The Paradox of AI in Higher Education: Qualitative Inquiry into AI Dependency Among Educators*. JMIR Medical Education, 11.
16. Krishnamurti, J. (1974). *Education and the Significance of Life*. HarperOne.
17. Mehrabi, N., et al. (2021). *A Survey on Bias and Fairness in Machine Learning*. ACM Computing Surveys.
18. MeitY. (2026). *India AI Impact Summit 2026: Milestone in Digital Public Infrastructure*. Press Information Bureau.
19. Merino-Campos, C. (2025). *The Impact of Artificial Intelligence on Personalized Learning in Higher Education: A Systematic Review*. Trends in Higher Education, 4(2), 17.
20. Ministry of Education. (2020). *National Education Policy 2020*. Government of India.
21. Nag, A. (2026). *VoicERA: Open Source Voice AI Stack for BHASHINI Infrastructure*. MeitY Digital India Division.
22. Pawar, S. (2023). *Language, Artificial Education, and Future-Making in Indigenous Language Education*. Taylor & Francis.
23. Popenici, S. (2023). *Artificial Intelligence and Learning Futures: Critical Narratives of Technology and Imagination in Higher Education*. Routledge.
24. Puttappa, K. V. [Kuvempu]. (1982). *The Message of Universal Man*. Mysore University Inaugural Address.
25. QuadC. (2025). *Top Trends in AI for Higher Education in 2025*.
26. Ramos-Benitez, M. J., García-Osorio, M. E., & Delgado, Y. (2026). *Critical Alliance of AI in Education: A Pedagogical Framework for Safeguarding Cognitive Skills*. International Medical Education, 5(1).
27. Sabzalieva, E., & Valentini, A. (2023). *Decision Tree Protocols for Safe AI Use*. UNESCO IESALC.
28. Sharma, R., et al. (2024). *Infrastructural Gaps and Faculty Unpreparedness in Rural Indian Universities*. ResearchGate.
29. Siddaramaiah, S. (2026). *Karnataka State Budget 2026-27: AI at the Core of Development*. The Hans India.
30. Sil, M., & Dutta, A. (2025). *A Comparative Theoretical Review of Indian and Western Educational Philosophers*. International Journal for Multidisciplinary Research, 7(4).
31. Tagore, R. (1921). *Towards Universal Man*. Visva-Bharati.
32. Tariq, M. (2025). *AI-Enhanced Personalized Learning Model and Real-Time Feedback Mechanisms*. Frontiers in Education.
33. Thesen, T., & Park, S. H. (2025). *A Generative AI Teaching Assistant for Personalized Learning in Medical Education*. npj Digital Medicine, 8(1).

34. Upadhyay, S., et al. (2026). *Overview of the TREC 2025 Retrieval Augmented Generation (RAG) Track*. arXiv:2603.09891.

35. World Bank. (2025). *The AI Revolution in Higher Education: Sustainable Transformation*.

36. Zaghi, A. (2025). *UConn Leverages AI to Personalize Learning for Student Success*. UConn Today.