Int. J. of AI and Education Technology

♦ ISSN: 2835-2432 Vol: 06, No. 01, 2027 ♦ PP. 01–07

Article DOI: https://doi.org/10.54216/IJAIET.060101

FULL LENGTH ARTICLE

The AI Wave Is Coming: How Should University Classrooms Be Reimagined?

Juan Chen[1,*]

[1] School of Resources, Environment and Safety Engineering, Hunan University of Science and Technology, Hunan Pro, Xiangtan 411201, China

Email: ChenJuna@gmail.com

Received: July 02, 2026 Revised: August 04, 2026 Accepted: August 20, 2026 ⋆ Corresponding author

ABSTRACT

Artificial intelligence (AI) technology is rapidly penetrating higher education, bringing profound transformations to university classroom instruction. However, existing research has paid limited attention to practical implementation pathways within real teaching contexts, leaving frontline educators without systematic operational guidance. Grounded in daily classroom practices, this paper aims to provide teachers with replicable and scalable strategies for Human-AI collaborative teaching, along with practical guidelines for applying AI tools. The study first outlines the contemporary context and driving forces behind integrating AI into university classrooms. It then systematically analyzes core challenges in current teaching practices—such as rigid teaching models, limited educational resources, inefficient classroom interaction, monotonous assessment methods, and excessive workloads for instructors. Finally, it proposes a comprehensive reform framework and implementation pathway for AI-enhanced university teaching, focusing on six key areas: reconfiguring teaching models, building intelligent resource-sharing systems, fostering student agency, establishing dynamic, whole-process evaluation mechanisms, supporting teachers in reducing workload and improving efficiency, and mitigating ethical risks associated with AI applications. Emphasizing practicality and feasibility, this paper offers frontline educators actionable solutions to navigate the transition toward intelligent education.

Keywords: Human-AI Co-teaching ▪ Precision Teaching ▪ Dynamic Evaluation ▪ Reimagined

1. INTRODUCTION

1.1 Research Background

Over the past decade, the pace and depth at which artificial intelligence (AI) has entered the field of higher education have exceeded the expectations of most people. From intelligent tutoring systems and learning analytics technologies, to the emergence of ChatGPT in late 2022, AI has gradually moved from being an "add-on" to teaching to becoming an integral part of university lesson planning, teaching, assignments, and exams. In a systematic review published by Crompton and Burke [1] in 2023, they summarized 138 empirical studies conducted between 2016 and 2022, finding that the number of AI education research papers increased by two to three times between 2021 and 2022, with undergraduate students becoming the main research subject group. This growth rate itself indicates one thing: university teaching is standing at an unavoidable crossroads. Bond et al. [2] conducted a more thorough study in 2024, conducting a meta-systematic review of 66 existing reviews, and concluded that the deficiency in this field is not the number of papers, but rather "ethical awareness, interdisciplinary collaboration, and academic rigor", with most studies focusing on the description of technical functions and providing far insufficient attention

to the teaching practice itself. Holmes and Tuomi's earlier research [3] also confirmed this: they systematically reviewed the types of AI education systems and teaching methods worldwide, and found that the actual implementation effect of AI tools in real classrooms was far from the level reported in the laboratory. That is to say, there is a huge gap between technical capabilities and teaching reality.

From a broader perspective, there is also a significant imbalance in AI education research. Mustafa et al. [4] re-reviewed 143 literature reviews conducted between 2012 and 2024 and found that the majority of the studies focused on the higher education stage. However, the distribution of AI's specific application scenarios was extremely uneven. Personalized learning and intelligent tutoring systems for students were the absolute hotspots, but support tools for teachers, decision-making assistance for managers, and systematic research on educational equity were still far from sufficient. Batista et al. [5] further pointed out in their review that after ChatGPT was released at the end of 2022, research in the field of generative AI experienced a boom. However, these achievements were highly fragmented. Some discussed academic integrity, some focused on a single tool, and some recorded a classroom experiment. But so far, there is still no review that integrates them and systematically connects the capabilities of generative AI with the actual needs of university classroom teaching reforms.

Furthermore, the mainstream discourse in this field also merits reflection. Bearman et al. [6] conducted an in-depth exploration of the narrative logic of AI-based higher education research from the perspective of critical discourse analysis, revealing an intriguing phenomenon: The mainstream narrative in Western academia almost portrays AI as an "irresistible force of change", and universities and teachers are tacitly assumed to be merely able to adapt passively. In other words, the initiative, judgment, and creative space of educators during the AI integration process have been seriously underestimated in the mainstream literature. At the same time, Rojas and Chiappe [7] pointed out through a review of 76 documents that the current discussions on AI empowering personalized learning are largely concentrated on the infrastructure level of digital ecosystems, such as networks, applications, and service platforms, while there is very little discussion on "how these systems connect with teachers' instructional designs and how they operate in physical classrooms". In conclusion, scholars have talked a lot about what AI can do, but they have said far too little about how AI is implemented in the classroom, especially how it functions in real university teaching scenarios.

1.2 Research Significance

This article, through the study of domestic and foreign literature, summarizes and concludes the structural difficulties faced by university classroom teaching. By studying cases and data on the application of AI in teaching, it obtains practical elements of reference value. The discussion mainly focuses on issues such as teaching models, teaching resources, teaching evaluation, and the reduction of teachers' burden and moral and ethical risks. Finally, through the research and exploration of the above issues and experiences, it analyzes and studies the methods of AI-based classroom teaching and practice that are suitable for the current situation of university classrooms in China.

Most of the existing articles organize their content based on different technical types, such as intelligent tutoring systems, learning analysis, and generative AI. This classification logic is convenient for technical developers, but for front-line teachers and educational managers, what they are truly concerned about is never the attribution of the technology itself, but rather what specific teaching problems these technologies can help them solve. Chan and Tsi [8] conducted an empirical study covering 399 students and 184 teachers from 8 universities, and provided a powerful judgment: Most teachers and students believe that generative AI cannot replace human teachers, not because the technology is not strong enough, but because the parts of teaching that involve critical thinking, emotional interaction, and value guidance cannot be done by machines. This article is precisely aiming to start from such an understanding and build a bridge between "what the technology can do" and "what education needs".

When universities are implementing AI-based teaching reforms, they never encounter abstract theoretical issues; instead, they encounter numerous specific daily dilemmas that are quite challenging: wanting to conduct personalized teaching but facing a teacher-student ratio that is fixed; wanting to use intelligent assessment but lacking confidence in its fairness and accuracy; wanting to make the classroom "more dynamic" but still using the same old interactive methods. This article aims to provide some clues for these problems. We will not be satisfied with merely listing "which school used which system", but will instead analyze typical cases from domestic and foreign universities, and extract transferable practices and lessons. Specifically, Ogunleye et al. [9] conducted a systematic review of 355 documents from 2017 to 2023, depicting the application panorama of generative AI in teaching, learning, and assessment. From automatic homework grading, generating personalized feedback, to assisting course design and development of teaching resources, these cases and methods can directly provide references for the classroom practice of front-line teachers; Lelescu et al.'s review [10] in a Nature-affiliated journal on educators' trust in generative AI reveals the real mindset of the teacher group during the acceptance of AI, including both expectations and fears, both active exploration and passive coping, and these are precisely the "human factors" that cannot be bypassed when formulating any AI teaching reform plan. This article focuses on the practical scenarios of real classroom teaching in universities, concentrates on the actual needs of front-line teachers for AI collaborative teaching, provides a set of systematic teaching implementation guidelines that have been tested in practice and have strong feasibility and operability, helps teachers clarify the implementation ideas of integrating artificial intelligence into the classroom, calmly handle various intelligent teaching tools, and orderly carry out high-quality human-AI collaborative classroom teaching.

2. CURRENT SITUATION AND CORE ISSUES OF UNIVERSITY CLASSROOM TEACHING

2.1 The Teaching Model Is Rigid, and the Problem of Homogeneity Is Prominent

From a macro perspective of teaching, the phenomenon of

homogeneity in teaching content acts as an insurmountable obstacle, suppressing the innovation of teaching methods and the vitality of development. Given the centralization of textbook selection and standardization of teaching syllabuses, the course content still lacks subject-specificity and hierarchical correlation in terms of depth and breadth, which remains the main challenge. Therefore, a series of strategies are proposed: implementing differentiated teaching based on students' abilities, learning goals, and subject requirements, to promote the individualized development of students [11]. Moreover, in today's era where AI is developing rapidly and fully influencing social life, the system of classroom operation has quietly changed. Considering it in the context of the AI era, a particular question needs to be asked: When AI can bring about huge, rich, extensive, and cutting-edge knowledge, how can teachers optimize the teaching model and achieve effective interaction?

2.2 Limited Teaching Resources and Insufficient Supply-Demand Matching

The limitation of educational resources is most evident in the shortage of teachers. If this trend continues, it will further exacerbate the long-standing shortages in fields such as mathematics and science. These shortages will further worsen the problem of insufficient supply-demand matching. Attention should be paid to the current situation of the teaching staff, providing an opportunity to take long-term measures and formulate a comprehensive and systematic strategy to build a strong and stable profession. The shortage of teachers reported widely in the media across various regions has become a hot topic in the field of education, especially in areas such as research and scientific development where there is insufficient supply-demand matching [12]. Moreover, traditional university classrooms rely on traditional resources such as paper textbooks and static PPTs, which are slow to update and lag behind in knowledge. At the same time, there is a lack of regional and inter-school sharing mechanisms for high-quality educational resources, the digital gap between urban and rural areas has widened, and the return on investment for enterprises is poor.

2.3 Ineffective Classroom Interaction, with a Serious Lack of Subjectivity

As the new curriculum progresses, interactive cooperative teaching has gradually entered the classroom and has shown great vitality. However, in practice, we have found that certain interactive cooperative sections exhibit low-efficiency or ineffective teaching phenomena. Traditional classrooms are centered entirely on the teacher, and the interaction between teachers and students is superficial and highly formalized. Most classroom interactions remain at the shallow level of teachers making simple questions and students responding passively [13]. Students have been in a passive state of receiving knowledge for a long time, and the space for independent thinking, active exploration, and hands-on innovation has been significantly reduced, which is not conducive to cultivating students' independent critical thinking abilities. In these initial explorations, AI intelligent question answering, group discussions, and virtual simulation training have become new teaching methods that replace pure theoretical explanations. It should be noted that these applications have not yet been widely promoted and are only implemented in small-scale pilot programs. The large-scale promotion effect needs to be further verified, but they have provided methods for the transformation of classroom forms in the future.

2.4 The Teaching Evaluation Is Monotonous and the Feedback Mechanism Is Lagging

When teachers are unable to fully understand the needs and expressed demands of students, how to enable students to actively participate in the feedback process becomes a major challenge. To address this, by reviewing the key elements that the teaching team focuses on during the feedback process and the ways in which students express their voices, the aim is to provide reference materials for educational researchers and practitioners, helping to design a personalized feedback system that meets the actual needs of students [14]. Moreover, university teaching is facing new challenges and opportunities. The traditional teaching evaluation system focuses on outcome evaluation, neglecting students' performance and ability development during the learning process. Students also cannot know their knowledge gaps and learning weaknesses. The feedback mechanism should be significantly improved.

2.5 Teachers Face Significant Teaching Pressure and It Is Difficult to Provide Precise Education

There is a complex interaction among self-efficacy, workload, social support, stress, and teachers' professional happiness. Work-related stress and fatigue may exacerbate the decline in happiness, which is highly consistent with the research topic of high teaching pressure. University teachers initially devoted themselves to the education field with great enthusiasm, but as time went by, with increasing work demands and lack of support, their work enthusiasm gradually decreased. Workload and teaching pressure have become increasingly concerned issues in the education field [15]. Moreover, numerous studies have shown that it is difficult for teachers to provide precise education. They also bear high social expectations and shoulder the responsibility of cultivating professional talents for the country. The university teacher profession has become a recognized profession with high knowledge density and high pressure.

The five categories of challenges discussed above are summarized in Figure 1, which provides a holistic view of the current predicament facing university classroom teaching.

3. REFORM IDEAS AND IMPLEMENTATION PATHS FOR UNIVERSITY CLASSROOMS ENABLED BY AI

3.1 Reconstruct the Teaching Model and Achieve Personalized and Precise Teaching

To truly implement individualized teaching, the first step is to break away from the old teaching traditions such as uniformity and standardization. Currently, with the technology available, the learning situation analysis methods used by AI can comprehensively track the learning progress at all stages, making it possible to conduct personalized processing before, during and after the class. Using the learning situation analysis methods of AI, before the class, the intelligent learn-

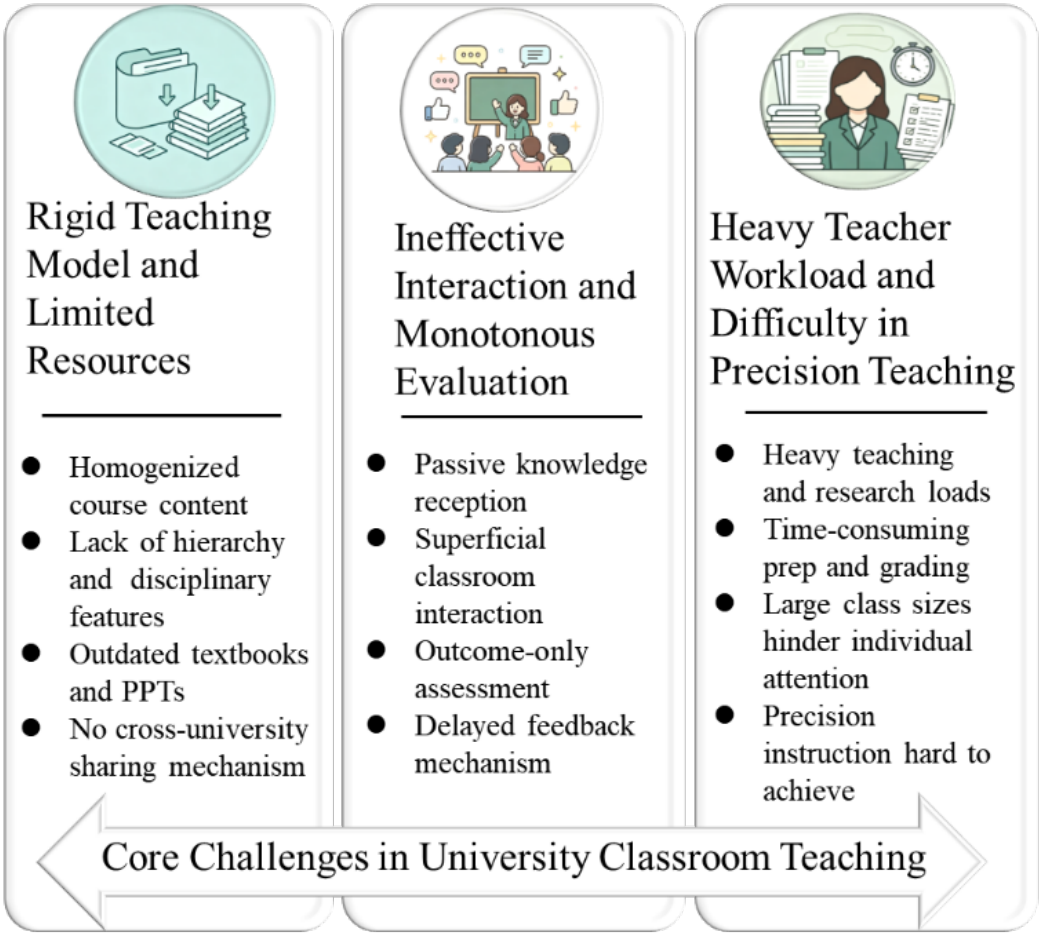

Figure 1. Core challenges in university classroom teaching.

ing system summarizes various materials related to students' preview, their existing knowledge and learning difficulties, and automatically generates personalized learning situation reports, which can be used as data references for teachers' lesson preparation. During the class, AI conducts real-time statistics on the listening status and knowledge absorption of the taught course, and based on this, flexibly controls the teaching progress and difficulty level of the content; after the class, the intelligent method is used to distribute review materials, practice questions and methods according to different levels to the corresponding students.

3.2 Expand Teaching Resources and Establish an Intelligent Shared Resource System

Traditional university teaching often faces three major resource challenges: slow update of textbooks, scarcity of industry-leading case studies, and teachers spending a lot of time creating courseware and exercises. Moreover, different universities have isolated their high-quality courses and training resources, making it difficult to share and exchange. Therefore, we can utilize AI resource integration and intelligent generation technologies to break through the traditional resource barriers.

The open courses, subject literature, industry examples, and virtual simulation materials included in AI are all high-quality resources available across the web, which can be updated and used over time, better aligning with the actual situation of subject development. This is a exemplary practice of updating various teaching materials on demand. Teachers only need to provide prompt words for the course or knowledge point, and the system will automatically find new academic materials, practical projects, and virtual experimental objects, categorize and organize the obtained information by chapters and categories, and promptly add content, effectively filling the gap in timeliness left by traditional textbooks. Furthermore, teachers should be encouraged to use AI to create courseware, set questions, and design teaching content. At the same time, each university should establish a cloud resource library, collaborate with each other to form a science and technology resource alliance, and share teaching plans and training materials. Students can obtain supplementary information across schools, and the system will recommend materials based on their actual situations, responding positively to learning differences.

3.3 Innovate Classroom Forms and Activate Students' Sense of Learning Autonomy

Based on the interactive methods described by AI and through virtual simulation and intelligent questioning, new types of immersive and interactive classrooms are designed. In traditional teaching, the teacher writes on the blackboard and explains the content, with students having few opportunities to think, collaborate, practice, or innovate. Currently, several universities have transformed classrooms using VR's virtual simulation and AI's interactive methods, incorporating group activities, virtual operations, and simulated defenses into the teaching schedule, and returning the initiative of learning to the students.

Nowadays, in the classroom, AI intelligent question answering, group discussions, virtual reality training, and intelligent debates are regarded as new teaching methods to replace pure theoretical explanations. Relevant courses use AI's instant question answering technology, assign group discussion content, use VR-related historical scenarios as an operable simulation background, and utilize artificial intelligence as an opponent for debate to stimulate thinking. Clearly, it is not dominated by one-sided preaching, but rather provides a more comprehensive guidance for students to think, try, and act. Students are encouraged to use AI tools to conduct their own investigations, organize knowledge, and design topics. They shift from "passive listening" to "active learning", and truly make the classroom a platform for main activities. They enrich the learning content with innovative thinking, collaborative methods, and practical achievements. The courses are not centered on the single-sided explanation by the teacher, but are carried out based on project thinking. After students form their own groups, they use AI to search for materials, summarize relevant knowledge, arrange the steps of the topic, complete the task-related work according to their professional conditions, and the teacher only provides appropriate prompts for the thinking or argumentation. The learning process is driven by individual exploration and group cooperation to advance the topic, without relying on the habit of simply listening, nor lacking comprehensive training in innovation, cooperation, and operation.

3.4 Optimize the Evaluation System and Establish a Dynamic Evaluation Mechanism Throughout the Entire Process

For a long time, almost all universities have relied on final exams to assess students' classroom performance. The content of the exam determines what students should learn, and the exam adopts a certain assessment form, so students should study in that way. The lagging knowledge points in students' daily learning and the improvement of their comprehensive abilities are rarely noticed by the teachers. The role of artificial intelligence technology is to save students' daily learning process, allowing them to view the details at any time and find out the learning problems through the system. Schools use artificial intelligence combined with massive learning data to carry out monitoring work, integrating students' daily learning performance and final exam results, creating diverse assessment models, and conducting evaluation work, in order to help students improve their learning, rather than just using it to assign exam scores.

The completion status of students' pre-class study, their speaking status in class, the depth of their thinking in class, the quality of their homework completion and their participation in practical exercises, all these kinds of information will be collected by the intelligent system. The system will independently judge students' knowledge mastery, their daily learning attitude, and their existing deficiencies, and then organize clear personal learning materials. Students can clearly understand their current learning situation.

During regular classes, the students' concentration during listening, the number of their participation in class, and the learning state shown on their faces will all be collected by intelligent devices. Here, the application of AI monitoring-related technologies is discussed. Firstly, continuous facial expression and attention monitoring involves highly sensitive personal biological information. The collection of such data requires following the principles of "informed consent" and "data minimization", and students have the right to decide whether to participate after fully understanding the purpose and risks. Secondly, existing research also indicates that attention algorithms based on facial features or behavioral data are not yet perfect, and they are inaccurate in judging different racial, gender, or neurodiverse student groups [16]. The reliability and fairness of their technology have not been verified on a large scale. More broadly, AI tools should not be assumed to transfer uniformly across multicultural or multilingual classrooms. Teacher-centred evaluations show that pedagogical norms, trust, and expectations vary by cultural and institutional context, making local adaptation and cross-cultural validation essential [17]. Therefore, AI monitoring systems should be positioned as a reference for teachers to make macroscopic learning situation judgments rather than precise evaluation tools, and should not be used for qualitative evaluations or disciplinary punishments of individual students at this stage.

Based on these contents, the teachers can identify difficult teaching content, select students who need more attention, and thus form a complete cycle of teaching, learning, assessment, and consolidation practice. When conducting assessment work, schools cannot only focus on how much students have memorized textbook knowledge, but also pay attention to independent thinking ability, critical thinking awareness, and teamwork ability. They should continuously observe students' long-term learning changes, so that the evaluation results can truly reflect students' growth, rather than just having a simple exam score.

3.5 Empower Teachers to Reduce Burden and Enhance Efficiency, and Improve the Professionalism of Classroom Education

Various daily chores often consume a large portion of university teachers' time. Tasks such as verifying classroom attendance, grading homework, organizing exam scores, and repeatedly answering the same questions gradually deplete the energy that teachers should use to design teaching content and have in-depth communication with students. AI systems can take over these basic chores, freeing up a lot of spare time for teachers to focus on areas that require more human effort. Reducing the workload on teachers is just one approach; the ultimate goal is to improve teaching quality. The freed-up time should be used for more heartfelt and in-depth educational work.

Automatic attendance registration, standardized homework grading, answering simple questions, and summarizing students' learning situations—all these tasks can be handled by AI. At the same time, it can assist teachers in drafting lesson plans, organizing knowledge points in textbooks, selecting appropriate classroom learning materials, and reducing the pressure of their lesson preparation. Universities can build online digital platforms to integrate various data generated during teaching, research projects, and teacher training. Based on this, the system can create individual teaching profiles for teachers, allowing them to clearly see their strengths and weaknesses in intelligent teaching. The relevant training programs in schools can start with basic software operation, and

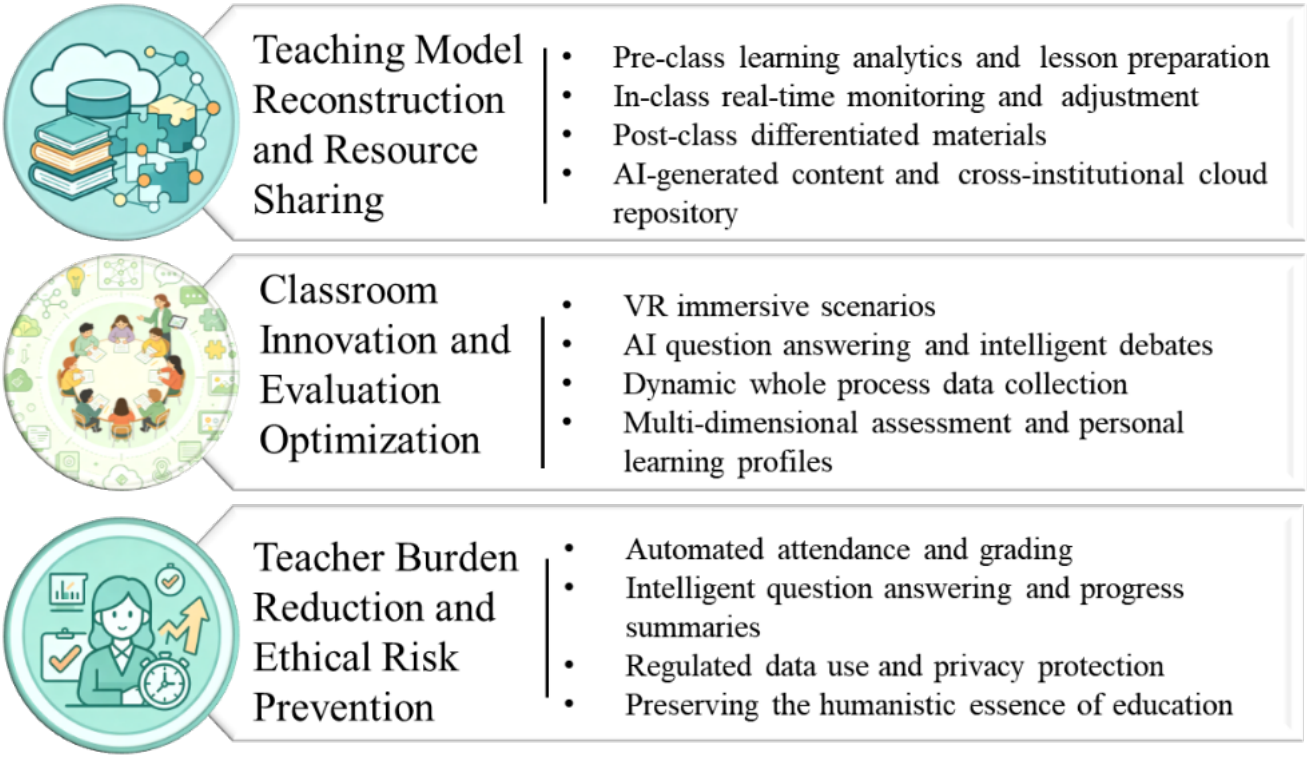

Figure 2. AI-empowered reform pathways for university classroom teaching.

then gradually learn how to integrate AI with teaching goals and class arrangements, so that new technologies truly serve daily teaching. It is not just for following trends and using intelligent tools. The main controller of the classroom is still the teacher. Basic tasks are handed over to AI, and teachers are responsible for elevating the teaching level. Teachers gradually move away from simply explaining textbook knowledge and focus on guiding students to think independently. They no longer lecture uniformly to the entire class but pay attention to each student's individual situation.

3.6 Uphold the Essence of Education and Avoid Risks of AI Classroom Application

If used appropriately, artificial intelligence tools can be excellent assistants for teaching and learning. However, if used improperly, they may bring about some unnecessary problems, such as issues related to academic integrity, the risk of content errors, security risks related to personal information and data, and the situation where students become reluctant to think actively and even experience a gradual decline in their thinking ability. These concerns are not unnecessary and require everyone's attention. What is more important is that if students rely on artificial intelligence to complete their learning tasks for a long time, they may gradually lose their ability to make independent judgments, academic sensitivity, and the patience needed to handle complex problems. Therefore, we must adhere to the principle that technology should serve education and cultivating talents is the fundamental goal. We need to regulate the use of artificial intelligence in the classroom and firmly hold onto the basic bottom line of education.

For the collection and use of students' learning data, there must be clear regulations and scopes. Who can view these data, how long the data will be saved, and where it will be used. All these contents should be informed to students in advance and obtain their consent. At the same time, avoid the misconception that a good-looking set of data means good teaching results. Do not let managers, teachers, and students deliberately perform to meet data indicators. This will make the actual content of the classroom empty. Although technology can provide assistance to teaching, the most precious warmth in the classroom comes from the real communication and ideological exchange between teachers and students. This part cannot be replaced by artificial intelligence and should not be replaced by it. Figure 2 summarizes the six major reform pathways for AI-empowered university classroom teaching derived from the preceding analysis, covering teaching model reconstruction, resource sharing, classroom innovation, evaluation optimization, teacher burden reduction, and ethical risk prevention.

The reform pathways enabled by AI are systematically presented in Figure 2, which synthesizes the six major dimensions derived from the preceding analysis: teaching model reconstruction, resource sharing, classroom innovation, evaluation optimization, teacher burden reduction, and ethical risk prevention.

4. SUMMARY

This research is based on the real classroom teaching scenarios in universities. It addresses the insufficient research on the implementation path of integrating artificial intelligence into university classrooms and the lack of systematic practical plans among frontline teachers. It also examines the background of intelligent technology empowering classroom teaching in this era, and systematically clarifies the multiple practical challenges currently faced by university classrooms, such as fixed teaching models, insufficient resource supply, low interaction efficiency, a single evaluation

system, and excessive teaching load for teachers. Focusing on the requirements of human-machine collaborative classroom construction, this paper constructs a complete and practically valuable framework for digital reform in the classroom, covering six aspects: reshaping teaching models, jointly building and sharing intelligent teaching resources, awakening students' awareness of autonomous learning, establishing a dynamic evaluation process throughout, relying on AI to reduce teachers' workload, and preventing ethical risks in intelligent teaching. These six paths are not isolated but mutually reinforcing: The precise transformation of teaching models relies on the effective support of intelligent resources and the timely feedback of dynamic evaluation; The reduction of teachers' burden and efficiency improvement is the prerequisite for conducting personalized guidance; And the implementation of all paths should be carried out under the bottom line of ethical risk prevention. The research results are focused on practical implementation and promotion, providing clear and feasible practical references and action support for university teachers to carry out intelligent classroom teaching and smoothly advance the digital transformation of higher education.

ACKNOWLEDGMENTS

This work was supported by Hunan Provincial General Project of Teaching Reform Research for Regular Undergraduate Colleges and Universities (202502000833).

REFERENCES

[1] H. Crompton, "Artificial intelligence in higher education: The state of the field," *International Journal of Educational Technology in Higher Education*, vol. 20, no. 1, pp. 1–20, 2023.

[2] M. Bond, H. Khosravi, M. De Laat, N. Bergdahl, V. Negrea, E. Oxley *et al.*, "A meta systematic review of artificial intelligence in higher education: A call for increased ethics, collaboration, and rigour," *International Journal of Educational Technology in Higher Education*, vol. 21, no. 1, p. 4, 2024.

[3] W. Holmes and I. Tuomi, "State of the art and practice in AI in education," *European Journal of Education*, vol. 57, no. 4, pp. 542–570, 2022.

[4] M. Y. Mustafa, A. Tlili, G. Lampropoulos, R. Huang, P. Jandri, J. Zhao *et al.*, "A systematic review of literature reviews on artificial intelligence in education (AIED): A roadmap to a future research agenda," *Smart Learning Environments*, vol. 11, no. 1, p. 59, 2024.

[5] G. Carnaz, "Generative AI and higher education: Trends, challenges, and future directions from a systematic literature review," *Information*, vol. 15, no. 11, p. 676, 2024.

[6] M. Bearman, J. Ryan, and R. Ajjawi, "Discourses of artificial intelligence in higher education: A critical literature review," *Higher Education*, vol. 86, no. 2, pp. 369–385, 2023.

[7] M. P. Rojas and A. Chiappe, "Artificial intelligence and digital ecosystems in education: A review," *Technology, Knowledge and Learning*, vol. 29, no. 4, pp. 2153–2170, 2024.

[8] C. K. Y. Chan and L. H. Y. Tsi, "Will generative AI replace teachers in higher education? a study of teacher and student perceptions," *Studies in Educational Evaluation*, vol. 83, p. 101395, 2024.

[9] B. Ogunleye, K. I. Zakariyyah, O. Ajao, O. Olayinka, and H. Sharma, "A systematic review of generative AI for teaching and learning practice," *Education Sciences*, vol. 14, no. 6, p. 636, 2024.

[10] A. Lelescu, S. Sava, G. Grosseck, and L. Malita, "Exploring trust in generative AI for higher education institutions: A systematic literature review focused on educators," *Humanities and Social Sciences Communications*, vol. 12, no. 1, p. 1961, 2025.

[11] Z. L. Wang and W. L. Chen, "A study on student ability differences and homogeneous teaching in higher mathematics instruction," *Educational Research and Reviews*, vol. 20, no. 11, pp. 156–162, 2025.

[12] D. Y. Guo, "Urban–rural school-age population changes and compulsory education resource allocation," *Frontiers in Education*, vol. 10, p. 1695386, 2025.

[13] J. Zhang, Z. Fang, and G. S. Rhee, "Analysis of classroom silence behaviors among Chinese and Korean undergraduates," *Frontiers in Psychology*, vol. 16, p. 1674145, 2025.

[14] K. M. Finn, M. G. Healy, E. R. Petrusa, L. H. Borowsky, and A. S. Begin, "Providing delayed, in-person collected feedback from residents to teaching faculty: Lessons learned," *Journal of Graduate Medical Education*, vol. 16, no. 5, pp. 564–571, 2024.

[15] J. C. Nwoko, E. Anderson, O. A. Adegboye, A. E. O. Malau-Aduli, and B. S. Malau-Aduli, "From passion to pressure: Exploring the realities of the teaching profession," *Frontiers in Public Health*, vol. 13, p. 1505330, 2025.

[16] J. Buolamwini and T. Gebru, "Gender shades: Intersectional accuracy disparities in commercial gender classification," in *Proceedings of the 1st Conference on Fairness, Accountability and Transparency*, vol. 81, pp. 77–91, 2018.

[17] M. Galletti and V. Cesaroni, "From end-users to co-designers: Lessons from teachers," in *Proceedings of the 20th Workshop on Innovative Use of NLP for Building Educational Applications (BEA 2025)*, pp. 505–516, 2025.