



# A Practical Study on Blended Teaching with Online Educational Resources in the Context of Artificial Intelligence

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**Abstract.** With the rapid development of information technology, the field of education is undergoing profound transformations. Blended teaching, as an integrated model combining online and offline instruction, has become a significant approach to enhancing teaching quality. Based on an analysis of the current teaching landscape and drawing on the practical experience accumulated by the teaching team over the years, this study designed and implemented a series of blended teaching practices by integrating artificial intelligence technology with online educational resources. The aim is to explore the effectiveness of this model in improving students' learning interest, learning abilities, and learning skills. The results indicate that AI-based online educational resources can significantly enrich teaching content and enhance interactivity, thereby improving teaching effectiveness. Meanwhile, the blended teaching model effectively fosters students' self-directed learning abilities, providing strong support for cultivating versatile talents who can adapt to the future development of society. This study offers practical references and theoretical foundations for educators to implement blended teaching in the context of artificial intelligence.

**Keywords:** Artificial Intelligence; Blended Teaching; Online Educational Resources; Digital Education

## 1 Introduction

With the deepening advancement of digital transformation in education, online and offline blended teaching has become a crucial direction for the reform of higher education. However, current blended teaching practices still face significant challenges, such as fragmented online educational resources, superficial teaching interactions, homogenized learning pathways, and delayed feedback on learning progress. These issues constrain the improvement of teaching effectiveness and make it difficult to meet students' personalized development needs. At the same time, traditional teaching

models also encounter deep-seated challenges in resource allocation, teaching methodologies, and student engagement.

The rapid development of artificial intelligence (AI) technology, leveraging its strengths in data processing, personalized recommendations, and intelligent interaction, offers the potential to address these challenges through technological empowerment. By integrating AI technology with online educational resources to construct an intelligent blended teaching model, it is possible to achieve widespread sharing and precise delivery of high-quality educational resources. Furthermore, through dynamic analysis of learning behaviors and optimization of interactive teaching pathways, this model can effectively enhance teaching quality and foster the development of students' self-directed learning abilities. This provides critical support for cultivating versatile talents who can adapt to the needs of future society.

Currently, substantial research has been conducted in the field of education focusing on blended teaching and the application of AI technology, yielding preliminary results. For example, Liashenko I V et al, by constructing an AI-driven blended teaching ecological chain, demonstrated how technology facilitates the restructuring of teaching processes<sup>[1]</sup>. Tian Guiju validated the effectiveness of an AI-empowered blended "golden course" model in enhancing students' practical skills within physical education courses<sup>[2]</sup>. Liu Guoqing et al, based on the Outcomes-Based Education (OBE) concept, explored pathways for the deep integration of Small Private Online Courses (SPOCs) with offline teaching<sup>[3]</sup>. Additionally, scholars such as Fan Gong and Haomin Yang and Xu Yanping, from perspectives of disciplines like automatic control principles and basic medical sciences, proposed strategies for optimizing blended teaching through technological means like knowledge graphs and dynamic resource updates<sup>[4-9]</sup>.

However, existing research primarily focuses on the application of singular technological tools or specific disciplinary contexts, lacking interdisciplinary and systematic practical studies on the integration of "AI systems with online educational resources, dynamic adaptation of blended teaching models, and comprehensive process effectiveness evaluation." Particularly, significant gaps remain in addressing core issues such as resource fragmentation and delayed learning feedback through intelligent technologies. Therefore, this study, titled "A Practical Study on Blended Teaching with Online Educational Resources in the Context of Artificial Intelligence," aims to construct a tripartite framework of "AI + Resources + Model" for blended teaching by integrating first-hand teaching data from multiple universities. The goal is to overcome bottlenecks in traditional teaching, such as uneven resource distribution and superficial interactions. It seeks to explore how intelligent technologies can achieve precise delivery of educational resources, dynamic optimization of teaching strategies, and quantitative evaluation of learning outcomes, thereby providing replicable practical paradigms for the digital transformation of education.

## **2 Theoretical Foundation and Current Status Analysis of Online and Offline Course Teaching**

With the accelerated advancement of educational digital transformation, the blended online and offline teaching model has emerged as a significant trend driving innovation in higher education. It not only combines the flexibility of online instruction with the interactivity of offline teaching but also optimizes the allocation of teaching resources through technological empowerment, thereby enhancing the overall quality of education. However, the effective implementation of blended teaching requires a deep understanding of its theoretical foundations and a comprehensive analysis of the current status and challenges associated with online, offline, and blended teaching models. The following discussion will elaborate on these three dimensions in detail.

### **2.1 Online Teaching: Dual Drivers of Digital Resources and Personalized Learning**

Online teaching is grounded in solid theoretical foundations, drawing from constructivism, connectivityism, and personalized learning theories. It leverages digital platforms to achieve widespread knowledge dissemination and customized delivery. This process emphasizes learners' active exploration and meaning construction in virtual environments while skillfully utilizing big data and artificial intelligence technologies to tailor personalized learning paths and resource recommendations for learners.

In the field of higher education, online teaching has been widely adopted, yet the current situation remains far from ideal, with several prominent issues. High-quality online course resources are unevenly distributed, and some universities, constrained by their conditions, lack the capacity to develop such resources independently. Online discussions and assignment submissions often become superficial, failing to effectively stimulate learners' deep thinking. Additionally, the analysis of learning data is often insufficient and incomplete, making it difficult for teachers to make targeted adjustments to their teaching based on accurate information. These issues significantly hinder the full potential of online teaching.

### **2.2 Offline Teaching: Traditional Advantages of Face-to-Face Interaction and Immediate Feedback**

Offline teaching is grounded in solid and profound theoretical foundations, rooted in behaviorism, cognitivism, and humanistic learning theories. It emphasizes promoting learners' knowledge construction and holistic development through face-to-face interactions and immediate feedback. In practice, offline teaching places great importance on the careful creation of teaching contexts and the deep emotional exchanges between teachers and students. This teaching model has a significant positive impact on stimulating learners' interest and enhancing their classroom engagement.

Although offline teaching remains dominant in higher education, the challenges it faces are equally significant. On one hand, the allocation of teaching resources is

highly uneven, with high-quality teaching talent and advanced experimental equipment concentrated in a limited number of institutions. On the other hand, teaching methods are relatively homogeneous, overly reliant on traditional lectures and lacking diversified pedagogical approaches. Additionally, student participation is often insufficient, with some learners showing a lack of proactive thinking in the classroom. These interrelated issues collectively undermine the quality and effectiveness of offline teaching.

### **2.3 Blended Teaching Mode: An Innovative Practice of Online-Offline Integration and Whole-Process Optimization**

The blended teaching mode is underpinned by solid and diverse theoretical foundations, skillfully integrating blended learning, educational ecology, and deep learning theories. This approach emphasizes achieving optimal learning outcomes by organically combining online and offline resources and optimizing the design of teaching interactions. Simultaneously, it places great importance on the holistic nature and dynamic balance of the teaching system, striving to promote deep learning and the comprehensive development of learners' abilities.

In the evolving landscape of higher education, the application of blended teaching modes has become increasingly widespread. However, in practice, the level of integration and the effectiveness of implementation vary significantly. Some institutions have achieved remarkable success in blended teaching, effectively bridging online and offline components. Yet, many others continue to grapple with challenges such as insufficient integration, resource shortages, and mismatched evaluation systems. Additionally, enhancing teachers' blended teaching capabilities and digital literacy remains a pressing issue that urgently needs to be addressed.

Looking ahead, it is essential to further strengthen research and practice in blended teaching modes and actively explore more scientific and efficient implementation strategies and evaluation systems.

## **3 Design of Blended Teaching Mode in the Context of Artificial Intelligence**

Amidst the wave of artificial intelligence sweeping through the education sector, traditional teaching models are facing unprecedented opportunities and challenges for transformation. The blended teaching model, as a pivotal direction for educational innovation, combines the strengths of both online and offline instruction. Moreover, with the deep integration of artificial intelligence, this model has been infused with new vitality and possibilities. Below, the unique appeal of the blended teaching model in the context of artificial intelligence will be elaborated upon in detail from four perspectives: design principles, teaching processes, technological support, and evaluation systems.

### **3.1 Design Principles: Student-Centered, Integrated Optimization, and Dynamic Adjustment**

When designing a blended teaching model in the context of artificial intelligence, it is essential to adhere to the core principle of student-centeredness. By leveraging AI's in-depth analysis of students' learning data, it becomes possible to accurately understand each student's learning style, knowledge base, and interests, thereby tailoring personalized learning paths and resources to stimulate intrinsic motivation for learning. Simultaneously, emphasis should be placed on the organic integration of online and offline teaching, breaking down the barriers between the two. This allows the rich resources and convenient tools available online to complement face-to-face interactions, guidance, and hands-on training in offline settings.

Furthermore, by utilizing AI to collect and analyze teaching data in real-time—such as learning progress and assignment performance—teaching strategies, content, and methods can be dynamically adjusted based on feedback. This ensures continuous optimization of the teaching process and guarantees that instruction remains aligned with students' evolving needs.

### **3.2 Teaching Process: Three-Stage Progression, Targeted Intervention, and Full-Course Follow-up**

The teaching process of the blended teaching model is divided into three closely connected stages: pre-class, in-class, and post-class.

**Pre-class:** Teachers utilize AI-based teaching platforms to curate and integrate high-quality online resources, which are then uploaded. Preview tasks are assigned to guide students in clarifying learning objectives. Students engage in self-directed learning, note down questions they encounter, and the system tracks their learning behaviors to provide feedback on their preview progress. Based on this information, teachers gain insights into students' initial understanding.

**In-class:** Teachers focus on addressing common difficulties identified during the preview phase through concentrated explanations and Q&A sessions. Intelligent tools are employed to facilitate diverse activities, such as case analyses and group discussions, thereby enhancing classroom interactivity. The system continuously collects students' learning data, enabling teachers to adjust the pace and methods of instruction in real time based on feedback.

**Post-class:** Teachers assign personalized homework and extension tasks, leveraging intelligent grading systems for automated evaluation and instant feedback. After reviewing their results, students target their weak areas for review and reinforcement. They also utilize supplementary resources to deepen their understanding of the knowledge. Throughout this stage, teachers remain engaged, providing ongoing guidance and support.

### **3.3 Technological Support: Platform Construction, System Development, and Tool Integration**

Robust technological support is essential for the successful implementation of a blended teaching model in the context of artificial intelligence. This involves constructing a comprehensive AI-enabled teaching platform that integrates functions such as teaching resource management, learning process tracking, teaching data analysis, and interactive communication. Such a platform provides teachers and students with a user-friendly interface, enabling educators to upload and manage resources, assign tasks, organize activities, and monitor data, while students can access resources, complete assignments, engage in discussions, and view feedback.

Developing an intelligent learning analytics system is another critical component. By leveraging machine learning and data mining technologies, this system conducts in-depth analysis of student learning data, uncovering learning patterns and trends to provide precise insights for teachers' instructional decision-making and students' personalized learning recommendations.

Additionally, integrating intelligent auxiliary teaching tools enhances the learning experience and effectiveness. For instance, intelligent speech recognition and synthesis tools facilitate voice-interactive teaching, intelligent image recognition tools aid in understanding visual information, and virtual reality (VR) or augmented reality (AR) devices create immersive learning environments. These technologies collectively contribute to a more engaging and effective educational experience.

### **3.4 Assessment System: Diverse Participants, Comprehensive Coverage, and Personalized Feedback**

Establishing a scientific and rational assessment system is crucial for the blended teaching model. A diversified assessment framework should be constructed, incorporating teacher evaluations, student self-assessments, peer assessments, and evaluations by artificial intelligence systems. Teachers provide comprehensive evaluations from perspectives such as the achievement of teaching objectives, knowledge mastery, learning attitudes, and competency development. Student self-assessment encourages reflection on the learning process and outcomes, fostering self-management skills. Peer assessment promotes mutual learning and communication, cultivating critical thinking and teamwork abilities. The artificial intelligence system offers objective and quantifiable evaluations based on learning data, serving as a reference for other assessment participants.

A full-process assessment approach should be implemented, focusing on all stages of learning preparation, progression, and outcomes to gain a comprehensive and objective understanding of students' learning situations. Personalized evaluation and feedback should be provided, addressing individual student differences and needs. Beyond merely evaluating performance, specific improvement suggestions and guidance should be offered to help students clarify their goals and directions, promote individualized development, and drive innovation in higher education teaching.

## 4 Assessment of Course Teaching Effectiveness in the Context of Artificial Intelligence

In the current era where artificial intelligence is deeply integrated into the education sector, conducting scientific, comprehensive, and precise assessments of course teaching effectiveness is not only a crucial step in measuring teaching quality but also an important means to drive continuous teaching optimization and promote personalized student development. The following discussion will unfold from four aspects: diversification of assessment subjects, comprehensiveness of assessment dimensions, intelligence of assessment methods, and personalization of assessment feedback.

### 4.1 Multi-Subject Co-Assessment: Gaining Multi-Perspective Insights into Teaching Effectiveness

In the current era where artificial intelligence is deeply integrated into education, the assessment of course teaching effectiveness is no longer limited to single-sided teacher evaluations. Teachers, as organizers and guides of teaching activities, leverage AI tools to access comprehensive data such as student classroom participation, assignment completion, and test scores. They can holistically and objectively evaluate students' learning performance and progress from perspectives such as the achievement of teaching objectives, accuracy in knowledge delivery, and effectiveness of teaching methods. For example, analyzing students' learning trajectories on intelligent learning platforms can help assess teaching effectiveness.

Students, as the primary learners, engage in self-assessment to reflect on their perceptions of the learning process and outcomes, fostering self-reflection and self-management skills. Peer assessments encourage mutual learning and communication, cultivating critical thinking and teamwork abilities. With the support of AI, students can utilize online evaluation systems to conduct self-assessments and peer assessments across multiple dimensions. For instance, intelligent evaluation tools can be used in group projects to assess members' contributions and collaboration attitudes.

AI systems, leveraging their powerful data processing and analysis capabilities, quantitatively evaluate learning effectiveness based on data such as students' learning time, progress, and answer accuracy, using machine learning algorithms and models. For example, intelligent learning analytics systems generate personalized learning reports to provide feedback.

For courses closely related to specific industries, inviting industry experts to participate in assessments allows for evaluating teaching effectiveness from a practical application perspective. This ensures alignment between course content and industry needs and provides professional direction for course improvement. The assessment framework is outlined in the Table 1 below.

**Table 1.** Multi-Perspective Teaching Effectiveness Evaluation.

Assessing Entity	Student Name	Knowledge Mastery (Average Score)	Practical Skills Score	Innovative Thinking Score	Team Collaboration Score	Communication Skills Score	Learning Interest Level (1-10)	Learning Motivation & Confidence
Teacher	S1	82	80	75	85	80	8	Good
Teacher	S2	88	85	80	90	85	9	Excellent
AI System	S1	—	70	—	—	—	—	—
AI System	S2	—	80	—	—	—	—	—
Student (Self-Assessment)	S1	—	—	—	—	—	7	Fair
Student (Self-Assessment)	S2	—	—	—	—	—	8	Good
Student (Peer Assessment)	S1 (to other group members)	—	—	—	Contribution:80, Cooperation: 85	—	—	—
Student (Peer Assessment)	S2 (to other group members)	—	—	—	Contribution: 85, Cooperation: 90	—	—	—
Industry Expert	Student Group (Overall)	—	Avg.improvement: 10 points	75	80	78	—	—

**4.2 Comprehensive Multi-Dimensional Evaluation for a Holistic Assessment of Teaching Outcomes**

The evaluation of course teaching effectiveness in the context of artificial intelligence encompasses comprehensive and multi-dimensional aspects, covering knowledge mastery, competency development, and affective attitudes.

Knowledge Mastery serves as the foundation of assessment. Through intelligent testing systems, diverse question types are designed to thoroughly examine students' abilities in memorization, comprehension, and application of knowledge points. The automatic grading feature of AI provides timely feedback on test results, analyzes

students' grasp of knowledge points, and offers a basis for teachers to adjust teaching priorities.

In terms of Competency Development, courses focus on cultivating students' thinking abilities, innovation skills, practical skills, teamwork skills, and more. By designing project-based learning tasks and practical activities, students' ability to apply knowledge to solve problems in real-world contexts is observed. For example, VR and AR technologies are utilized to create immersive learning environments for assessing practical operation and innovative thinking abilities, while group project performances are analyzed to evaluate teamwork and communication skills.

Affective Attitudes significantly impact learning outcomes. Assessments can focus on aspects such as learning interest, motivation, and self-confidence. Leveraging AI-powered affective analysis technology, data from students' learning processes—such as speech, facial expressions, and text—are analyzed to understand their emotional states. For instance, analyzing speech tones and facial expression changes during classroom discussions helps gauge interest levels, while examining feedback and comments on learning platforms provides insights into learning motivation and self-confidence.

### **4.3 Intelligent Methods Empowered, Enhancing Assessment Efficiency and Accuracy**

Artificial intelligence technology brings intelligent methods to the evaluation of course teaching effectiveness, improving both the efficiency and accuracy of assessments.

Big Data Analysis Methods involve collecting data on student learning behaviors, test scores, assignment completion, and other aspects. Big data analysis techniques are then applied to uncover patterns and trends within the data. For instance, analyzing learning behavior data can identify students' weak areas and common errors, providing teachers with targeted teaching suggestions. Comparing learning data across different classes or students helps assess differences in teaching effectiveness, offering references for teaching improvements.

Learning Analysis Technology leverages artificial intelligence algorithms to conduct in-depth analysis of student learning data, constructing personalized learning models for students and predicting academic performance and development trends. This supports proactive intervention and personalized teaching, such as providing additional tutoring resources and learning suggestions for students facing difficulties based on their learning models.

Intelligent Assessment Tools can automatically generate personalized test questions based on teaching objectives and content. These tools adjust the difficulty level in real time according to students' responses, enabling adaptive assessment. Additionally, they feature automated grading and data analysis functions, delivering quick and accurate feedback on test results along with detailed assessment reports. For example, intelligent programming assistance platforms can automatically check for code errors and provide optimization suggestions as well as per-

formance scores. The design of intelligent improvement methods based on data indicators is shown in Table 2 below.

**Table 2.** Improvement in Data Indicators for Intelligent Methods.

Intelligent Method	Pre-Implementation Metrics	Post-Implementation Metrics	Explanation of Improvement
Big Data Analysis(Identifying Weak Areas)	Average time to identify weak areas: 5 days, Accuracy of common error identification: 70%	Average time to identify weak areas: 1 day Accuracy of common error identification: 90%	Significant reduction in detection time and notable improvement in accuracy, enabling more timely and precise instructional recommendations for teachers.
Big Data Analysis (Comparative Teaching Effectiveness Assessment)	Manual data collection and comparison for teaching effectiveness across classes: 1 week, Comparison metrics: 5 items	Automated data generation for cross-class comparison: 1 day Comparison metrics: 10 items	Assessment efficiency greatly enhanced with more comprehensive indicators, providing richer references for teaching improvement.
Learning Analytics Technology(Grade Prediction)	Average error in grade prediction: 10 points	Average error in grade prediction: 5 points	Improved prediction accuracy, offering stronger support for early teacher intervention and personalized instruction.
Learning Analytics Technology(Development Trend Prediction)	Inability to accurately predict student development trends	Ability to predict student development trends with 80% accuracy	Enables early planning of learning pathways for students, meeting the diverse developmental needs of learners.
Intelligent Assessment Tools(Score Distribution Analysis)	Uneven score distribution: concentration in high and low score ranges	Relatively uniform score distribution: balanced proportion across score ranges	Provides a more comprehensive and accurate reflection of overall student writing proficiency, offering a basis for instructional adjustments.

#### 4.4 Personalized Feedback Support to Meet Student Development Needs

Course teaching effectiveness evaluation in the context of artificial intelligence emphasizes personalized feedback, providing targeted suggestions based on students' individual differences and learning needs to promote their personalized development.

Personalized Learning Reports are generated based on students' learning data and assessment results. These reports include information such as academic per-

formance, progress, knowledge mastery, and competency development. They also offer improvement suggestions and recommend learning resources tailored to students' shortcomings. For example, for students struggling with mathematics, the reports analyze their weak areas and recommend instructional videos and practice exercises.

Personalized Learning Path Planning leverages AI algorithms to design learning pathways according to students' abilities and goals. These pathways are dynamically adjusted based on learning progress and feedback, ensuring that students learn at a pace suitable for them. For instance, students with strong learning abilities may be assigned challenging tasks and advanced courses, while those who need more support may receive foundational reinforcement courses and tutoring plans.

Teachers provide personalized guidance based on students' individualized learning reports and assessment results. Through one-on-one communication, teachers gain insight into students' learning difficulties and needs, enabling them to develop tailored learning plans and support strategies. For example, in programming courses, teachers can offer targeted programming exercises and project practice guidance based on each student's progress and performance. The statistical table design for personalized learning situations and the general template for personalized feedback are shown in Table 3 and Table 4 below.

**Table 3.** Personalized Learning Statistics Data.

Personalized Feedback Method	Student Name	Pre-Feedback Learning Status	Post-Feedback Learning Status	Improvement Range	Satisfaction Feedback (1-10)
Personalized Learning Report (Weakness Analysis)	S1	Weak grasp of Knowledge Points A and B	Significant improvement in mastering Knowledge Points A and B	Grade improvement $\geq 10$ points	8
Personalized Learning Report (Resource Recommendation)	S2	Lack of interest in the course, insufficient motivation	Increased interest in the course, actively completes recommended exercises	Notable change in attitude, grade improvement $\geq 5$ points	9
Personalized Learning Path Planning (Weak Learners)	S3	Weak learning ability, lagging behind in learning progress	Completed foundational reinforcement courses as planned, learning progress is relatively good compared to class average	Learning progress improvement $\geq 20\%$	7
Personalized	S4	Strong learn-	Completed chal-	Knowledge	9

Learning Path Planning (Strong Learners)		ing ability, existing courses lack challenge	lenging tasks and advanced courses, significant expansion of knowledge	mastery improvement $\geq 15\%$	
Teacher Personalized Guidance (Programming Course)	S5	Weak programming foundation, unclear programming logic	Can independently complete simple programming projects, notable improvement in programming logic	Significant improvement in programming ability	8
Teacher Personalized Guidance (Project Practice)	S6	Insufficient project experience, weak teamwork skills	Played an active role in projects, improved teamwork skills	Enhanced project completion quality, teamwork score improvement $\geq 10$ points	9

**Table 4.** General Template for Personalized Feedback

Personalized Learning Report Feedback Type	Student Name	Description of Previous Learning Situation	Feedback Content	Description of Learning Situation After Feedback	Quantitative Indicators of Progress	Student Satisfaction Feedback (1-10 Points)
Analysis of Weak Areas	[Student Name]	[Description of specific weak knowledge points/skills]	Analysis of Weakness Causes: 1.Cause 1; 2.Cause 2 Improvement Suggestions: 1.Suggestion 1 (e.g.,strengthen XX practice); 2. Suggestion 2 (e.g.,watch XX instructional video)	[Improvement in knowledge/skill mastery]	[Percentage or specific score of improvement in grades/skills]	[Self-assessed score by student]
Resource Recommendations	[Student Name]	[Description of insufficient learning motivation]	Resource Recommendations: 1.Video Resources: XX link,	[Improvement in learning inter-	[Description of change in learning attitude/score]	[Self-assessed score by student]

		tion/interest]	suitable for students at XX level; 2. Exercise Sets: XX questions, targeting XX knowledge points	est/motivation]	improvement]	
Weak Learning Ability	[Student Name]	[Description of weak learning ability/lagging progress]	Path Planning: 1. Basic Consolidation Courses: XX course, X times per week 2. Tutoring Plan: XX time, one-on-one tutoring	[Improvement in learning progress/basic mastery]	[Percentage of improvement in learning progress]	[Self-assessed score by student]
Strong Learning Ability	[Student Name]	[Description of strong learning ability/lack of challenging courses]	Path Planning: 1. Challenging Tasks: XX task, requiring XX standards; 2. Extension Courses: XX course, delving into XX field	[Improvement in knowledge expansion/ability enhancement]	[Percentage of improvement in knowledge mastery level]	[Self-assessed score by student]
Teacher's Personalized Guidance (Specific Course)	[Student Name]	[Description of difficulties in course learning]	Guidance Plan: 1. Targeted Exercises: XX exercises, X questions per day; 2. Project Practice Guidance: XX project, step-by-step guidance	[Improvement in course ability/project completion]	[Description of ability improvement/score improvement in project evaluation]	[Self-assessed score by student]

## 5 Conclusion

In an era marked by the vigorous development and deep integration of artificial intelligence into education, the evaluation of teaching effectiveness has embarked on a new journey characterized by diversified assessment subjects, comprehensive evaluation dimensions, intelligent assessment methods, and personalized feedback. The participation of diverse assessment subjects—teachers, students, AI systems, and industry experts—brings together multiple perspectives, ensuring a more holistic and objective evaluation of teaching outcomes. Comprehensive evaluation dimensions,

covering knowledge mastery, skill development, and emotional attitudes, provide a thorough examination of teaching achievements and offer substantial insights for improvement. Intelligent assessment methods, leveraging big data analytics, learning analytics technologies, and intelligent evaluation tools, significantly enhance the efficiency and accuracy of assessments. Personalized feedback, tailored to individual student differences and developmental needs, supports students in achieving personalized growth.

It is believed that with the ongoing innovation and refinement of artificial intelligence technologies, the evaluation of teaching effectiveness will continue to overcome existing limitations and evolve toward more precise, efficient, and personalized assessment models. This progress will inject sustained momentum into the enhancement of education quality, driving the educational sector toward a stage of higher quality and greater innovation.

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