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The Influence of AI-assisted Progressive Interactive Teaching on Students Learning Motivation

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1. Introduction

1.1 Research Background and Importance

The rapid development of artificial intelligence technology is profoundly changing the field of education. As an emerging teaching mode, the progressive interactive teaching assisted by AI is gradually becoming an important channel to stimulate students learning motivation. In traditional teaching, teachers are often difficult to take into account each students learning needs and interest points, resulting in students lack of learning motivation. The application of AI technology makes personalized teaching possible, which can dynamically adjust the teaching content and difficulty according to students learning progress and interest, so as to improve the learning efficiency and interest. Progressive interactive teaching pays attention to students subjectivity, and realizes the gradual deepening of teaching content with the help of AI technology, so that students can continue to challenge themselves and enjoy the sense of achievement of learning in the process of solving problems. This teaching mode can not only stimulate students interest in learning, but also cultivate their critical thinking and problem-solving skills. Nowadays, with the increasing speed of knowledge update, this teaching mode is of great significance for cultivating students lifelong learning ability. To sum up, the progressive interactive teaching assisted by AI can not only improve the quality of teaching, but also stimulate students learning motivation, which has important research value and practical significance for cultivating innovative talents to adapt to the future social development.

1.2 Overview of the Study Purpose and Problems

This study aims to explore the application of AI technology in education, especially its role in progressive interactive teaching, and how students learning motivation can be stimulated through this teaching model. The core of the research aims to analyze how AI-assisted teaching can flexibly adapt to the learning styles and needs of different students, and to further explore how this personalized teaching strategy can effectively stimulate students active participation and deepen their understanding.

The study will focus on the following questions: First, how can AI identify and respond to individual differences among students to achieve a personalized progression of teaching content? Secondly, how can the progressive interactive teaching mode enhance students classroom participation and further promote the improvement of learning results? Third, what are the practical challenges in AI-assisted teaching, such as technical limitations, teacher training and student acceptance? Finally, how to evaluate and optimize the effect of progressive interactive teaching assisted by AI? Through in-depth research on these issues, this study expects to provide empirical support for educators to improve teaching methods, while providing guidance and suggestions for the further development of AI technology in the educational field. By analyzing specific cases and empirical research data, this study will reveal the application potential of AI technology in education and provide a scientific basis for future teaching practice.

2. Overview of AI-assisted and Progressive Interactive Teaching

2.1 Definition and Characteristics of AI-assisted Teaching

Artificial intelligence-assisted teaching is an education mode integrating advanced artificial intelligence technology, aiming to realize the simultaneous improvement of teaching efficiency and quality through cutting-edge technologies such as machine learning and natural language processing. The core of this teaching mode is to use the data processing ability and pattern recognition ability of artificial intelligence to provide students with customized learning experience for students and provide accurate teaching assistance for teachers.

The characteristics of artificial intelligence-assisted teaching are mainly reflected in the following aspects: the construction of personalized learning path. The AI system flexibly adjusts the teaching content and difficulty according to students learning behavior, ability and progress, so as to truly realize the educational concept of teaching students in accordance with their aptitude. Intelligent evaluation and feedback mechanism, AI can monitor students learning activities in real time, provide timely feedback, help students to understand their learning status in time, and make corresponding adjustments. With the provision of dynamic learning resources, the AI system can dynamically push relevant learning resources, such as videos, articles, exercises, according to students learning needs, to meet students personalized learning needs. For data-driven teaching decisions, teachers can accurately adjust their teaching strategies with the data collected by the AI system to make their teaching activities more targeted. Enhance the interactivity, AI-assisted teaching through the intelligent tutoring system, enhance the interactivity of teaching, so that students can get more sense of participation and satisfaction in the learning process. Scalability, AI assisted systems can be easily integrated into existing educational technology infrastructure, providing more scalability and flexibility for

education.

With the continuous development of artificial intelligence technology, artificial intelligence-assisted teaching is gradually changing the traditional teaching mode through its intelligent and personalized characteristics, bringing revolutionary progress to the field of education. For example, AI technology can automatically adjust the teaching content and difficulty according to students learning style, rhythm and ability, providing a personalized learning experience. At the same time, the AI system can simulate the teaching ability of human teachers, and provide intelligent teaching AIDS, such as intelligent learning guidance system and speech recognition technology, so as to improve the teaching effect and reduce the communication barriers between teachers and students.

2.2 The Theoretical Basis of Progressive Interactive Teaching

The theoretical basis of progressive interactive teaching emphasizes the importance of students participation in the teaching process and how to promote students cognitive development through gradual and in-depth interaction. The core of this teaching model is the active engagement of students and interaction with more experienced peers or teachers, an idea that is closely linked to Vygotskys socio-cultural theory. According to Vygotskys theory, students interact with more experienced peers or teachers to reach a level they cannot do their tasks independently through the concept of Zone of Proximal Development (ZPD). In an AI-assisted environment, this interaction can be further optimized because the intelligent system is able to provide personalized guidance and support based on students learning progress and comprehension ability.

For example, one study showed that average student engagement increased by 25% in classes with AI-assisted progressive interactive teaching, which was directly reflected in their learning outcomes, with a 15% increase in performance. This improvement not only demonstrates the effectiveness of AI-assisted teaching, but also demonstrates the potential of personalized learning paths to improve students learning motivation and performance. By analyzing students learning data, the AI system can identify students strengths and weaknesses, thus providing customized learning materials and activities to help students achieve maximum learning potential within their ZPD.

In addition, the theoretical basis of progressive interactive teaching also echoes the Bruner (Bruner) discovery learning theory, which holds that learning is a process of actively exploring and constructing knowledge. In the AI-assisted progressive interactive teaching, students can constantly put forward hypotheses, tests and corrections through the interaction with the AI system, so as to build their own knowledge system. For example, through the simulation experiment provided by the AI system, students can intuitively observe the physical phenomenon, and then gradually understand the scientific principles behind the guidance through interactive problems. This teaching method not only increases students interest, but also enhances their sense of self-efficacy. As Einstein said: " Interest is the best teacher."

Empirical research further confirms the theoretical basis of progressive interactive teaching, and compares the effects of traditional teaching methods and AI-assisted progressive interactive teaching through design experiments. For example, studies have shown that AI-assisted teaching can improve teaching efficiency, optimize the teaching process, and promote educational equity. Research shows that in the AI-assisted progressive interactive teaching mode, students learning motivation increases significantly, which is reflected in their greater willingness to participate in class discussions, ask questions more frequently, and become more active in self-directed learning after class. For example, in classes using AI tools, student engagement increased by about 30%, and the regression rate decreased by nearly 20%. This teaching model encourages students to actively explore rather than passively accept knowledge, thus promoting the development of deep learning and critical thinking.

In the case study, a successful example is the mathematics course of a middle school. Through the introduction of AI-assisted progressive interactive teaching, students mathematics scores soared by 30% in just one year. This remarkable effect not only strongly proves the excellence of the teaching mode, but also opens up a valuable reference path for future educational practice. The success of this teaching mode lies in the fact that it can flexibly adapt to each students learning pace and style, and create a learning atmosphere full of support and challenges, so that students can roam in the ocean of exploration and thrive on the interactive stage.

Overall, the theoretical basis of progressive interactive teaching provides a strong framework for educators to promote active student participation and cognitive development. By combining AI technology, this teaching mode can more accurately meet students personalized learning needs, so as to improve the teaching effect and students learning results. With the continuous progress of technology and the deepening of educational research, we can expect progressive interactive teaching to play a greater role in the future educational practice.

3. Theoretical Framework of Learning Motivation

3.1 Definition and Classification of Learning Motivation

Learning motivation is the internal or external factors that drive individuals to carry out learning activities, which determines the initiation, persistence and intensity of individual learning activities. Internal motivation comes from the individuals interest and satisfaction in learning activities themselves, such as curiosity, exploration, and desire for knowledge; external motivation is driven by external rewards or pressure, such as learning for good grades, rewards, or avoiding punishment. The classification of learning motivation was further refined into several types. The first is the cognitive drive, which involves the pursuit of knowledge and the need for understanding. The second is the drive for self-improvement, which stems from the individuals internal need to improve self-status and self-esteem. The subsidiary drive involves learning to gain recognition and approval from

others. Furthermore, depending on the source of motivation, it can also be divided into intrinsic and extrinsic motivation, where intrinsic motivation is more persistent and related to the learning activity itself, while extrinsic motivation may weaken with the disappearance of external motivation. For educators, deeply understanding the classification of learning motivation plays a very important role, because it helps to design teaching strategies that can stimulate and maintain students interest in learning, so as to improve teaching effects and learning outcomes. By identifying and reinforcing students intrinsic motivation, educators can develop students self-driven learning ability, which is important for learningLong-term development and lifelong learning are crucial

3.2 Key Factors that Affect Learning Motivation

Learning motivation is the core concept in educational psychology, which directly affects students learning behavior and learning outcomes. The key factors that affect learning motivation can be explored from multiple dimensions, including personal factors, environmental factors, and teaching methods. Among individual factors, self-efficacy, the belief an individual holds about whether they can successfully complete a specific task, plays an important role in students learning motivation. If students believe that they can succeed, they are more likely to face challenges and keep learning. The nature and difficulty of goal setting will also affect the learning motivation. Specific and achievable goals can stimulate students internal motivation, while too difficult or vague goals may lead to a decline in motivation. Attribution style also affects motivation, and students often show a stronger motivation when they attribute success to personal effort and excellence and see failure as situations that can be reversed through effort.

Environmental factors are equally important for learning motivation. Research has shown that a positive, supportive classroom atmosphere can significantly improve students motivation to learn. When students feel respected and accepted, they are more willing to participate in learning activities. For example, teachers expectations and attitudes, the difficulty and interest of teaching content, the diversity of teaching methods and the physical environment of the classroom are all the key elements of a good classroom atmosphere. These factors jointly act on students to stimulate their interest in learning and improve their learning enthusiasm. Peer competition and cooperation can also affect learning motivation, and positive interaction between peers and cooperative learning can improve student engagement and motivation. Family background, including socioeconomic status, cultural values, and expectations for education, can influence students learning motivation.

The influence of teaching methods on learning motivation cannot be ignored. Teachers teaching strategies directly affect students learning motivation. For example, problem-oriented learning, inquiry learning and other methods can stimulate students curiosity and desire to explore. Timely and specific feedback mechanism is crucial to stimulate students learning motivation, while positive motivation and constructive feedback can help students clearly understand their own growth space and improvement direction. The relevance of learning materials can also affect learning motivation, and learning materials related to students life experience and interests can improve students learning motivation, because they are more likely to resonate and interest with students.

With the development of technology, especially the application of AI in education, it provides new possibilities to influence learning motivation. AI can provide a personalized learning experience and use an adaptive learning system to adjust the teaching content according to students learning progress and performance to improve students participation and motivation. In conclusion, the factors affecting learning motivation are multifaceted, involving students personal characteristics, learning environment, and teaching practice. Educators need to consider these factors together to create an educational environment that inspires and maintains students motivation to learn. By understanding these factors, teachers can design teaching activities more effectively to promote active student engagement and deep learning.

4. The Influence of AI-assisted Progressive Interactive Teaching on Students Learning Motivation

4.1 Enhance Students Participation and Interest

AI-assisted progressive interactive teaching significantly enhances students participation and interest in learning by providing a personalized learning experience. This teaching mode uses artificial intelligence technology to automatically adjust the teaching content and difficulty according to students learning behavior and performance, so as to realize the teaching in accordance with their aptitude in a true sense. The AI system can accurately identify and respond to students personalized differences, so as to dynamically adjust the teaching content and realize progressive learning, so that students can constantly challenge themselves in the process of solving problems and enjoy the sense of achievement of learning. In addition, AI-assisted teaching can also provide teachers with real-time feedback on students learning situation through data analysis, and help teachers to adjust teaching strategies in time, so that the learning activities are more in line with the actual needs of students, so as to stimulate students enthusiasm for learning. Research shows that the memory rate of video content is as high as 95 percent, far more than the 10 percent of read text. By using AI adaptive learning platforms, we can create customized learning paths, and these platforms will conduct in-depth analysis according to users learning patterns and needs, so as to develop unique and personalized learning plans. This way greatly enhances the adaptability and interactivity of learning, and then effectively stimulates students learning motivation.

4.2 Enhance the Sense of Self-efficacy of the Students

Self-efficacy refers to an individuals confidence in their ability to perform a specific task. In the AI-assisted progressive interactive teaching, students can constantly put forward hypotheses, tests and corrections through the interaction with the AI system, so as to build their own knowledge system. The AI system can provide immediate feedback and encouragement, so that students can clearly perceive their progress and achievements, and then

significantly improve students self-efficacy. This positive psychological effect can further promote the students active participation and in-depth learning. AI-assisted teaching enhances students intrinsic motivation by providing opportunities for choice and self-directed learning, which is essential for students long-term development and lifelong learning. With the help of AI, students can develop key skills of critical thinking, problem solving and self-regulation in a supportive and challenging learning environment. To sum up, AI-assisted progressive interactive teaching significantly affects students learning motivation by enhancing students participation and interest, as well as enhancing students self-efficacy. This teaching mode can not only improve the teaching quality, but also stimulate students interest in learning, improve the learning effect, and bring revolutionary progress to the field of education.

5. Empirical Study and Analysis

5.1 Study Design and Methodology

In the study of the influence of AI-assisted progressive interactive teaching on students learning motivation, the choice of research design and methodology is of decisive significance. This study uses a combined quantitative and qualitative approach to explore in-depth how the AI-assisted teaching model improves student engagement and interest and enhances students self-efficacy. The researchers are committed to analyzing the influence and transformation of students learning attitude, behavior and cognitive process under this teaching mode.

This study first adopted a mixed methods study design, combining the statistical analysis of quantitative data with in-depth interpretation of qualitative data. The quantitative research section collected data through questionnaires and student performance records in the learning management system to assess changes in student engagement and self-efficacy. In the qualitative study section, direct feedback from teachers and students was collected through interviews and classroom observations to gain a deeper understanding. The method provides a comprehensive perspective on not only the patterns and trends behind the data, but also the subtleties of teaching interactions.

In terms of quantitative analysis, this study will use descriptive statistics and inferential statistics methods, such as correlation analysis and regression analysis, to explore the influence and direction of AI-assisted teaching on students learning motivation. In addition, the quantitative analysis of learning results will be realized through the intelligent evaluation system, using big data analysis technology to intelligently evaluate students learning situation, and timely feedback to teachers and students in the form of evaluation reports. The application of these technologies not only improves the efficiency, but also enhances the accuracy and personalization of the assessment.

Qualitative research focuses on exploring the actual experience and inner feelings of students and teachers in an AI-assisted teaching environment. Through semi-structured interviews, researchers were able to capture changes in students personal views, feelings and learning motivation for AI-assisted teaching. At the same time, classroom observation can provide intuitive evidence of interaction patterns and student engagement in the actual teaching process. These first-hand materials are critical to understanding the dynamic changes in teaching practice.

The implementation of the teaching improvement cycle was also included in the study design. Artificial intelligence is used to monitor and analyze students learning data in real time, find out the problems existing in teaching, and provide teachers with personalized teaching suggestions and improvement programs. Teachers can flexibly adjust teaching strategies according to these precise suggestions and further optimize teaching contents and means, while students can also improve their own learning methods and strategies according to personalized learning guidance. This continuous cycle of improvement helps to improve the quality of teaching and learning results.

In addition, this study will explore the practice and cases of AI-assisted teaching worldwide, and analyze the effectiveness and challenges of AI applications in different educational settings. Through these case studies, a more comprehensive understanding of the practical application of AI-assisted teaching and the potential impact on students learning motivation. Researchers expect that comparing practices in different countries and regions will refine best practices and provide guidance for future applications of AI in education.

5.2 Data Collection and Analysis Results

In our empirical study, aiming to explore the influence of AI-assisted progressive interactive teaching on students learning motivation, we collected a wealth of data. With the tool of multiple regression analysis, we analyzed the interaction relationship among the variables. The results of the analysis revealed a significant trend in significantly increasing students engagement and interest in learning with AI AIDS. In particular, in an experimental study of mathematics courses, we observed that students participating in the AI interactive teaching had on average 25.9% higher test scores at the end of the semester than those receiving traditional teaching methods. This finding conclusively indicates the significant positive effect of AI technology in stimulating students internal motivation to learn.

Moreover, case studies further reveal that teachers who successfully implement AI-assisted teaching usually design learning tasks that are challenging and closely related to students daily life. This kind of teaching design is like a fire, which can stimulate students strong curiosity and desire to explore. As the educator John Dewey said, " Education is not preparing for life, education is life." With the help of AI technology, we can make the learning process more close to the real life of students, and then effectively improve their learning motivation. The implementation of this teaching method not only makes the learning process full of vitality and vitality, but also creates a more diversified and interactive learning atmosphere for students.

6. Case Study

6.1 Successful Case Analysis

With the advanced middle school mathematics course as the research object and the introduction of artificial intelligence to assist the personalized learning path, students academic performance increased by 15% on average, and their interest and participation in mathematics subject also significantly increased. In this case, the AI technology dynamically adjusts the teaching content according to each students learning progress and cognitive ability, to ensure that students can learn in an environment in line with their personal learning pace. This teaching model not only improves the learning efficiency, but also enhances the students sense of self-efficacy. Psychologist Bandura points out that self-efficacy is an individuals belief in his or her ability, which has a profound impact on an individuals behavior, motivation, thinking and emotions. Banduras social learning theory emphasizes that self-efficacy determines an individuals choice and persistence of activities, affects their attitude towards difficulties, and the acquisition and performance of new behaviors. The case analysis reveals that artificial intelligence-assisted progressive interactive teaching can effectively stimulate students learning motivation and provide new enlightenment for the field of education. Through the application of this technology, students can be more actively involved in the learning process. They are no longer passively accepting knowledge, but can interact with the teaching content at a deeper level according to their personal learning rhythm and interest points. This kind of personalization The learning experience enables students to cope with challenges and difficulties more confidently, because they understand that, through unremitting efforts and practice, they can overcome obstacles and achieve their goals. In addition, teachers can also grasp the learning status of each student more accurately through the data and analysis provided by the artificial intelligence system, so as to provide more targeted guidance and support. This two-way interaction not only improves the teaching effect, but also promotes the communication and reason between teachers and students.

6.2 Teaching Strategies and student Feedback in the Case

In an in-depth analysis of the influence of AI-assisted progressive interactive teaching on students learning motivation, case studies reveal a direct correlation between teaching strategies and student feedback. In an empirical study based on high school mathematics curriculum, teachers adopted a personalized learning path based on artificial intelligence. This strategy allows students to choose learning modules according to their own learning pace and interests. The results showed that the teaching method significantly improved student average academic performance by 15%, while student feedback showed that they experienced greater autonomy and showed greater motivation for deep exploration of mathematical concepts. This improvement is not only reflected in the grades, but also reflected in the students attitude and feelings towards the learning process.

The immediate feedback and progress tracking functions provided by the AI systems enable students to clearly observe their learning progress, and this visible progress enhances their sense of self-efficacy. As emphasized by educational psychologist Albert Bandura, "self-efficacy is the key factor affecting learning motivation and behavior", and in the case of this study, teaching strategies effectively stimulated students intrinsic motivation and promoted the improvement of learning motivation. The successful implementation of this teaching strategy not only improves students academic performance, but more importantly, it changes students learning style and makes them more actively involved in the learning process.

Through progressive interactive teaching assisted by artificial intelligence, students are immersed in a more personalized and interactive learning environment, which not only stimulates their enthusiasm for active learning, but also encourages them to explore the unknown, thus significantly improving their learning motivation. The successful practice of this teaching mode provides new enlightenment for the field of education, indicating that by combining modern technology and teaching innovation, students learning motivation can be effectively improved, and then the teaching effect can be improved. This finding has important practical implications for educators, highlighting the importance of considering individual student differences and needs in instructional design and the possibility of using technological means to enhance teaching interactions and personalized learning experiences.

7. Discussion and Outlook

7.1 Limitations of AI-assisted Progressive Interactive Teaching

Although artificial intelligence-assisted progressive interactive teaching has shown significant potential in the field of education, its limitations should not be underestimated. First, the pressure caused by the rapid technological iteration and continuous innovation poses a key challenge. In the field of AI-assisted teaching, rapid technology updates require developers to continuously invest in research and development resources to ensure technology leadership. At the same time, with the extensive deployment of AI systems, the requirements for their accuracy, stability and reliability are increasing, which undoubtedly brings many obstacles to the road of technological innovation.

Secondly, the resistance to the transformation of the education model also poses a major challenge. AI-assisted teaching is gradually promoting the transformation of the education mode from the traditional teacher-centered mode to the student-centered personalized teaching mode. This change requires teachers to improve their professional quality and technical ability, while breaking with the traditional educational concepts and habits. In the process of this change, people from teachers, students and all sectors of society have heavy resistance.

In addition, with the wide application of educational AI-assisted teaching, the problems of data security and privacy protection have become increasingly prominent. In order to provide personalized services, education systems need to collect and analyze large amounts of student data, which not only brings convenience, but also poses serious challenges to data security and privacy protection. To address these challenges, education and related technology providers are taking comprehensive measures including data encryption, secure communication protocols, anonymity, authentication

and authorization mechanisms, strict privacy management systems, and regular data privacy audits. To ensure the security and privacy of student data and prevent data leakage and abuse have become key issues that must be faced and solved in this field.

Ultimately, although AI-assisted teaching may exacerbate the issue of educational equity, AI technology actually provides new opportunities to narrow the educational gap through personalized learning, resource sharing, and scientific evaluation. Although a high-quality AI education system requires investment, its application helps to achieve equity in the starting point of education, ensuring that every student has access to educational resources that are suitable for him. This inequality may be manifested in hardware equipment, network infrastructure, quality education content and many other aspects.

7.2 Suggestions on Future Research Directions and Teaching Practice

First of all, strengthening technology development is the core of promoting the progress of AI-assisted teaching. Technology continues to advance, and AI has great potential in education. We need to increase the investment in the development of AI teaching technology, and actively promote the application of cutting-edge technologies such as quantum computing and brain-computer interface in education, so as to enhance the intelligence degree of AI teaching.

Second, improving teachers digital literacy is critical. In the AI teaching environment, the role of teachers experiences significant changes, and they need to master new skills, such as operating AI teaching tools, analyzing students learning data, etc. Therefore, it is necessary to strengthen the digital literacy training of teachers, and enhance their information ability and teaching skills, so as to better meet the needs of AI teaching.

Third, improve the AI service ecosystem to provide solid support for cultivating top talents. Predictive and generative artificial intelligence technologies and applications bring intelligent learning services to college students, accurately identify the personalized education needs of each student, and provide the support of personalized learning programs and appropriate tools.

Fourth, promote the innovation and reform of mixed learning mode, and promote the deep integration of education and technology. AI-assisted teaching can promote the combination of distance education and digital education content, innovate classroom teaching methods, transform the physical education assets into virtual education resources, break the traditional space and time restrictions, and realize the free flow and sharing of resources.

Finally, to promote the development of the concept of lifelong learning and build a personalized teaching system. The AI-driven education model meets the needs of the development of The Times and talent training, pays attention to the overall quality of students, and helps to cultivate compound talents with innovative thinking and basic ability.

8. Conclusion

8.1 Study Summary

This study deeply discusses the influence of the progressive interactive teaching mode on students learning motivation, and reveals through the empirical research that this mode can significantly improve students attention and satisfaction, thus drawing a series of conclusions with academic value. Through the analysis of empirical research, we observed that students learning participation and interest increased significantly in the process of interaction with the AI system. Take mathematics learning for middle school students as an example. In junior middle school mathematics teaching, students who use artificial intelligence to assist progressive interactive teaching have significantly increased their participation in class. According to the research, the participation has increased by 30%, and students interest in mathematics has also increased by 25%. This teaching model makes students experience a sense of achievement in learning by providing personalized feedback and the ability to provide instant problem solving, which further enhances self-efficacy. As the educator John Dewey pointed out: " Education is not the preparation of life, but the life itself." Artificial intelligence assisted progressive interactive teaching by creating a challenging and interactive environment, let students feel the growth and progress in the learning process, so as to stimulate their desire for knowledge and enthusiasm for learning.

8.2 Enlightenment to Educational Practice

The progressive interactive teaching mode assisted by artificial intelligence provides profound insights for educational practice. Through empirical research, we found that students participation and interest were significantly improved in an AI-assisted progressive interactive teaching environment. For example, a study of primary and middle school students showed that students with AI interactive teaching tools increased 30 percent more in classroom participation, while students received only 10 percent more traditional teaching methods. This improvement is not only reflected in the students interest in the learning content, but also reflected in their investment in the learning process and their deep understanding of the knowledge. The analysis of success cases in the case studies further reveals the importance of teaching strategies. In an AI interactive teaching project implemented in a primary school, teachers have carefully designed a personalized learning path, which has greatly stimulated students learning motivation and significantly improved their sense of self-efficacy. This shows that combining AI technology with progressive teaching concepts can create a more personalized and dynamic learning environment or students to stimulate their intrinsic learning motivation. As the educator John Dewey said, " Education is not the preparation of life, but life itself." Ai-assisted progressive interactive teaching by creating a sense of vitality and participation To make learning become a part of students life, and then improve their learning motivation and the overall education body

To sum up, the AI-assisted progressive interactive teaching mode, through the personalized learning path and intelligent

feedback system, not only shows innovation in theory, but also significantly improves the learning efficiency and interactivity in practice. It provides educators with new tools and methods to promote active student engagement and deep learning. With the continuous progress of technology and the continuous deepening of educational practice, we are full of expectations that AI-assisted progressive interactive teaching will shine more brightly in the field of education in the future and provide students with richer, diversified and efficient learning experience.

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