An Assessment of Teaching Models and Strategic Recommendations Under the Background of Digital Transformation

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Abstract
In the current era, educational digital transformation stands as a strategic pillar driving high-quality education development, presenting a new proposition. The digitized environment, promoting inclusivity and the seamless integration of online and offline components, has led to notable transformations in teaching methodologies and students’ learning behaviors, owing to the integration of information technology. The traditional singular and didactic classroom teaching model falls short in meeting expectations for teaching effectiveness. Researching teaching models not only represents a departure from conventional classroom teaching methods but also serves as a vital avenue for talent development in the modern era. This article commences by delving into the current state of teaching models, scrutinizing the factors that influence them and the disparities that exist, while also addressing strategies for bolstering teaching effectiveness. This undertaking has now emerged as a significant task within the realm of educational and pedagogical reform research.

Keywords: digital transformation, teaching models, strategy research

1. Introduction
The ongoing advancement in the latest technological revolution and industrial transformation, marked by accelerated innovations in new-generation information technologies such as big data, artificial intelligence, and cloud computing, has infused remarkable impetus into the realms of education development and innovation. These novel teaching models furnish substantial technological underpinning and assurance, facilitating the advancement of personalized teaching and learning within the educational landscape.

In his report to the 20th National Congress of the Communist Party of China, General Secretary Xi Jinping emphasized the imperative of advancing educational digitization and establishing a lifelong learning society and a learning-oriented nation accessible to all citizens. In February 2023, the Central Committee of the Communist Party of China and the State Council published the “Overall Layout Plan of the Country’s Digital Development”, underscoring the robust execution of the national education digitization strategic initiative. The iterative enhancement of teaching models stands as a pivotal action in the execution of the Digital China strategy and the advancement of Digital Chongqing’s development. It serves as a substantial catalyst to expedite educational transformation, as well as foster innovation and reform in education. In classroom instruction, it is imperative to depart from the traditional knowledge transmission model and, in alignment with the demands of contemporary education, establish a scientific and standardized educational framework. Employing information technology, classrooms should be transitioned to student-centered environments, encouraging proactive critical thinking and the development of independent inquiry skills. This gradual shift should lead to the development of a new teaching model that emphasizes teacher guidance while promoting student subjectivity. This model is designed to meet the practical needs of personalized learning for students and effective teaching for educators.

Equity, personalization, lifelong learning, and flexibility have emerged as the foundational tasks and overall
objectives in the realm of educational digitization, offering a well-defined path for the construction of teaching models. Following years of relentless exploration and practical implementation, classroom teaching reforms have yielded favorable outcomes. Nevertheless, in the post-pandemic era and amidst the concurrent implementation of “double reduction” policies, accelerating the establishment of new teaching models has evolved into an urgent and pivotal challenge demanding immediate solutions.

2. Current State of Classroom Teaching Models

2.1 Analysis of Learning Abilities

At present, a majority of both educators and students display a limited enthusiasm for the integration of information technology in the classroom, resulting in the following challenges: Firstly, a considerable number of students have not yet been able to establish personalized digital learning systems. They rely on teacher guidance for all classroom learning activities. If teachers do not actively participate in teaching activities, many students become disengaged. Additionally, it has been noted that many students face challenges in managing their time effectively after class, which ultimately impedes their ability to reinforce and extend the impact of the teaching. Secondly, certain educators display a lack of proactive adaptation to emerging trends and are hesitant to leverage information technology for driving classroom innovation. Following the establishment of teaching and learning objectives, educators may fall short in promptly accessing essential pre-class assessment information about their students through the use of information technology, resulting in less-than-optimal teaching outcomes.

2.2 Analysis of Teaching Content

With the advancement of internet technology, a multitude of digital resources in novel forms continues to surface, including digital educational resources based on virtual simulation, holographic projection, interactive videos, digital twins, and more. In the practical teaching process, educators must harness information technology to implement intelligent teaching methods aimed at the contextual delivery of knowledge, with the ultimate objective of nurturing students’ application skills and hands-on competencies. In the present day, educators must gain a deep understanding of the evolving teaching models within the ‘Internet+’ environment. They should acquire a firm grasp of pertinent internet technologies and skillfully steer students as they engage in their daily learning activities, consistently enhancing classroom learning outcomes.

2.3 Changes in Learning Methods

The advent of the big data era has significantly broadened students’ avenues for learning. They can now access essential knowledge not only through teachers’ classroom lectures but also via the internet. For instance, digital educational resources are not only constantly updated but also available in a diverse range. The deep integration of information technology with the classroom can only be realized when information technology is seamlessly incorporated into teaching, and both teachers and students are fully immersed in the digitalization of their teaching and learning processes. This approach effectively addresses the issue, leading to continuous enhancements in students’ and teachers’ digital literacy.

3. Key Issues in the Current Teaching Models

3.1 The Innovation of Teaching Models Exhibits a Significant Degree of Arbitrariness

Teaching models should facilitate educators in conveying their teaching content more clearly through the integration of information technology in the teaching process. In the design and execution of classroom teaching content, it is especially crucial for certain instructional materials to replicate authentic workplace scenarios. Leveraging information technology-driven project design can foster a more profound comprehension of teaching content and introduce information tools that allow students to engage in real work processes. This approach enriches students’ information literacy and practical skills. While some knowledge scenarios can be comprehended by students with simple explanations, the application of intelligent teaching methods may lead to counterproductive outcomes.

3.2 The Application of Teaching Models Displays Considerable Blindness

In their teaching, some educators opt to enrich the classroom by using various information technology teaching software, rather than diligently delving into classroom dynamics and relevant teaching theories to select suitable intelligent teaching models. By thoughtfully selecting appropriate teaching platforms throughout the instructional process, educators can not only enhance teaching materials and incorporate typical cases but also facilitate online teaching, online Q&A, and online self-directed learning capabilities. This enhances the efficiency of teachers’ teaching endeavors.

3.3 Research on Teaching Models Tends to Be Utilitarian

The quest for novelty in teaching models has increasingly become a prevalent trend among many educators, particularly with the amplifying impact of information technology. However, in this pursuit, the deeper
significance of pedagogical philosophy is often disregarded. As educators, it is imperative not only to convey knowledge to students but also to underscore the distinctiveness of classroom teaching. In everyday teaching courses, beyond acquiring fundamental knowledge, it is equally vital to proactively cultivate students’ digital literacy, encompassing in-depth analysis and exploration of subject matter. Teachers can employ feedback from teaching as a reference for subsequent classroom enhancements.

4. Research on Strategies for Teaching Model Reform

While exploring the implementation of intelligent teaching methods in the instructional process, teachers encounter specific challenges when constructing intelligent teaching models. To address these issues, the following strategies are recommended:

4.1 Teachers’ Digital Literacy Requires Enhancement

With the profound evolution of internet technology, the utilization of intelligent teaching models for various instructional activities, with students positioned at the focal point of the classroom, can effectively exemplify the student-centered educational philosophy. The transformation in teaching models not only revolutionizes the teaching methodology within the classroom but also necessitates teachers to consistently bolster their digital teaching philosophies and competencies. This is crucial for advancing the comprehensive process of information-based teaching management and attaining the digitalization of teaching management.

4.2 The Utilization of Data in Intelligent Teaching Processes Requires Improvement

Within the reform of teaching models, there has been a gradual transition towards information-driven management of the teaching process. This necessitates teachers to proactively adjust their teaching ideologies and incorporate data across the entire process, enabling visual data analysis, the generation of multidimensional student reports, and the genuine implementation of personalized and diversified student education. This approach cultivates an innovative educational and teaching ecosystem.

5. Conclusion

At present, China is actively executing its digital education strategic action, with the goal of establishing an equitable, inclusive, high-quality, accessible, suitable for everyone, and efficient digital education system. This endeavor enhances teaching efficiency and drives the development of a robust education system through digital education, contributing to the nation’s educational strength. The transformation of teaching models not only empowers teachers to gain deeper insights into students’ pre-class backgrounds but also enhances students’ comprehension of classroom teaching content. The construction of the new teaching models still faces practical challenges, this article only offers an implementation strategy and optimization suggestions for reference. However, propelled by digital empowerment, the transformation and intelligent enhancement of teaching methods will expedite the development of new teaching models. This transition will shift the focus of education and teaching methods from application-driven and integrated development to innovation-driven and ecological transformation. The ultimate goal of this transformation is to achieve a significant leap in the high-quality development of digital education.

Fund Project

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