

Research on Online and Offline Mixed Mode Teaching Reform Based on Chaoxing Platform

Gongjin Chen^{a,*}, Yantao He^b, Yuting Kong^c, Jun Nie^d

Department of Computing, Guangdong University of Science and Technology, Dongguan, China

^achengongjin@gdust.edu.cn, ^bheyantao@gdust.edu.cn, ^ckongyuting@gdust.edu.cn,

^d13739149@qq.com

**Corresponding author*

Keywords: Mixed Mode, Teaching Reform, Educational Technology, Online Teaching, Offline Teaching

Abstract: With the progress of information technology and the change of education needs, traditional offline teaching has been difficult to meet the requirements of modern education. As a comprehensive online education tool, Chaoxing platform provides rich learning resources and interactive functions, and becomes an important means to promote teaching reform. This paper discusses the online and offline hybrid mode based on the Chaoxing platform, including inverted classroom, blended learning and modular teaching. The research shows that this hybrid model can effectively combine the flexibility of online learning and the interactivity of offline teaching, and improve the teaching effect and learning motivation. However, there are still challenges in the implementation process, such as technology dependence, learning management and educational equity. This paper puts forward strategies such as optimizing technical support, designing courses reasonably, strengthening interactive feedback and paying attention to educational equity, aiming to provide practical suggestions for educators in the application of mixed mode based on Chaoxing platform.

1. Introduction

1.1. Research background

This paper aims to deeply explore the application of the online and offline mixed mode based on Chaoxing platform in teaching reform, analyze its advantages and challenges, and put forward feasible implementation strategies and suggestions. Through detailed analysis and empirical research, this paper is expected to provide valuable reference and guidance for the teaching reform of higher education institutions, and provide solid theoretical and practical support for the optimization and widespread promotion of blended teaching mode^[1-2].

1.1.1. Limitations of traditional teaching

The traditional education model takes the physical classroom as the core, and the teacher-student interaction is mainly realized through face-to-face communication. Although this model is direct, it

has many limitations: the teaching time and space are fixed, the resource distribution is uneven, and it is difficult to meet the personalized learning needs of students. At present, with the rapid updating of knowledge and the diversification of students' demands, the traditional teaching mode is facing the challenge that it does not match the development needs of modern education.

1.1.2. Advantages of online teaching

The rapid development of Internet technology has promoted the rise of network teaching and is reshaping the face of education field. Network teaching breaks the limitation of time and space and realizes the global sharing of high-quality learning resources. Students are free to choose their learning time and space according to their own learning pace and preferences. The online teaching platform integrates rich multimedia resources and interactive tools to provide a rich and dynamic learning experience for learners.

1.1.3. Challenges of blended teaching

The blended teaching model combines the flexibility of online learning with the interactivity of offline teaching, aiming to create a more dynamic and efficient learning environment. However, during the implementation process, teachers and students may face challenges such as technology adaptation, learning management and instructional design. In addition, ensuring educational equity, evaluating and improving teaching effectiveness are also key issues to be solved in blended teaching mode.

1.2. Research purpose

1.2.1. Evaluation and benefits of blended teaching

Through comparative analysis, this paper aims to verify the effectiveness of blended teaching in improving academic performance, deepening knowledge understanding and enhancing skill application. The article will explore how this model can stimulate students' interest through flexible learning styles and interactive experiences, and analyze how the resources and tools of Chaoxing platform can optimize teaching content and improve resource utilization efficiency.

1.2.2. Challenge identification and strategy proposal

The article will identify and address the technology adaptation, instructional design, and self-management challenges for teachers and students as they adapt to hybrid instructional platforms. Based on this, strategies will be proposed to ensure the smooth implementation of the blended teaching model, and optimize platform performance and instructional design to enhance user experience and learning outcomes.

1.2.3. Educational decision support and equity promotion

This paper will provide data support for teaching reform and resource allocation in colleges and universities to promote education equity and resource balance. At the same time, it discusses the impact of blended teaching on the professional growth of teachers, and how to cultivate students' long-term learning outcomes and lifelong learning ability, and actively contribute to the global education reform. The purpose of this paper is to provide in-depth understanding and practical guidance for mixed teaching mode in the field of higher education, promote teaching reform and improve teaching quality.

1.3. Significance of research

1.3.1. Teaching innovation drive

This paper explores in depth the hybrid teaching model based on the Chaoxing platform, which not only provides a more flexible and personalized learning experience for students by integrating online self-learning with offline interactive discussion, but also provides a new teaching strategy for educators. The implementation of this model is expected to break the limitations of traditional teaching, introduce more innovative teaching methods and technologies, so as to meet the needs of modern education and train talents to adapt to the future society.

1.3.2. Education quality improvement

This paper assesses the effectiveness of blended teaching models in improving student achievement and promoting deeper knowledge understanding and skill application. The research pays special attention to how to stimulate students' learning motivation, improve their learning engagement and learning effectiveness through mixed teaching mode. By optimizing the allocation of teaching resources and enhancing the interaction of teaching, the blended teaching mode provides a strong support for improving the overall quality of education, ensuring that students can obtain a more comprehensive development in a diversified learning environment.

1.3.3. Promoting education equity

Educational equity is the key to realizing social justice. This paper analyzes the potential of blended teaching models to reduce educational disparities between students from different regions and backgrounds. Especially in remote areas and resource-limited environments, the blended teaching model helps to achieve a balanced distribution of educational resources by providing high-quality online educational resources, improve the penetration rate and accessibility of education, and thus provide equal educational opportunities for all students.

2. Overview of the Chaoxing platform

2.1. Platform function

Chaoxing Platform is a comprehensive education information platform, which provides a variety of functions to support the professional development of teachers and the implementation of blended teaching mode. The key functions are as follows.

2.1.1. Rich teaching resource library

The platform has a wide range of teaching resources, including electronic books, academic articles, video lectures, etc., covering multiple disciplines. These resources enable teachers to select materials according to their teaching needs, design course Outlines, and even customize personalized learning paths to meet the diverse learning needs of students. The continuous updating of the resource library ensures that the teaching content is current and forward-looking, enabling teachers and students to keep up with the latest developments in academia and industry.

2.1.2. Interactive and Intelligent Teaching Tools

The platform's interactive tools, such as online discussions, real-time Q&A and homework feedback systems, facilitate effective communication between teachers and students. Intelligent

teaching tools, including teacher timelines, check-ins, whiteboards and live streaming capabilities, improve the efficiency of classroom management and enable teachers to implement diverse teaching strategies. The live streaming function has provided important support for online teaching, especially during the epidemic.

2.1.3. Teacher development and teaching research support

Through the Teacher Development Center, the platform provides a wealth of professional development resources, such as online training and teaching assessment tools, to support teachers to upgrade their teaching skills and reflect on teaching practices. At the same time, the platform encourages teachers to participate in teaching and research projects, innovate teaching content and methods, and apply the latest educational concepts to teaching to improve teaching quality and effect.

2.2. Platform characteristics

2.2.1. Configuring Resource Balance

By providing a wealth of online education resources, the Super Star platform has effectively narrowed the education gap, enabling schools in remote and resource-poor areas to access quality teaching content. During the epidemic, the platform's "demonstration teaching package" and other resources are particularly important, they support teachers to establish online courses for free, and promote the innovation of teaching methods and the update of teaching concepts.

2.2.2. Data-driven teaching optimization

The platform's data analysis tools provide teachers with detailed tracking of the teaching process, enabling teachers to conduct teaching evaluation and research based on objective data. These functions help teachers accurately understand students' learning status and optimize teaching strategies based on data feedback to better meet students' learning needs.

2.2.3. Interface friendliness

The user interface of the Chaoxing platform is intuitive and easy to use, providing a user-friendly operating experience. Whether it is resource search, course learning or teacher-student interaction, users can enjoy a smooth experience. Auxiliary materials such as "Super Star Learning Guide (Teacher Edition)" further simplify the user's operation process and improve the efficiency of teaching and learning.

3. Definition and form of online and offline mixed mode

3.1. Mixed mode overview

Blended Learning is an educational model that combines traditional face-to-face teaching with modern online learning. It aims to improve learning effectiveness and teaching efficiency by integrating online and offline learning activities. It mainly includes the following three points.

3.1.1. Integration and optimization of teaching mode

Blended teaching combines online self-directed learning with offline interactive discussion to create an interactive and flexible learning environment. This model optimizes the personalized

advantages of online learning and the interactive characteristics of offline teaching, and achieves the maximum teaching effect by balancing the proportion of the two.

3.1.2. Personalized learning and technology application

Blended teaching focuses on personalized learning paths tailored to students' learning habits and needs. Using the data analysis and adaptive learning technology of the online platform, teachers are able to provide customized learning resources to enhance the adaptability and pertinency of the learning experience.

3.1.3. Teaching objectives and evaluation mechanism

In blended teaching, clear teaching objectives are central, focusing on developing students' higher-order thinking and deep learning outcomes. Continuous formative and summative evaluation ensures the achievement of learning objectives, supplemented by timely feedback to help students and teachers understand learning progress and provide support for the adjustment of teaching strategies.

3.2. The main form of blended teaching

3.2.1. Flipped Classroom

The flipped classroom model requires students to independently learn the course content, such as watching video explanations, reading materials or completing preview tasks, through online resources such as the Super Star platform before class. This practice allows students to learn at their own pace and enter the class with questions and reflections. In the classroom, teachers use face-to-face time for in-depth discussions, problem solving, group work and practical activities to enhance students' understanding and application of knowledge. The flipped classroom model effectively reverses the traditional order of homework and lecture in order to promote students' active learning and deep understanding^[3-4].

3.2.2. Blended Courses

The blended course design combines online autonomous learning and offline classroom teaching, aiming to improve the teaching effect through the organic combination of the two learning modes. The online component may include accessing course content on the Chaoxing platform, participating in forum discussions, submitting assignments, and taking online quizzes, while the offline component may include traditional face-to-face lectures, seminars, lab classes, and workshops. The blended curriculum allows students the flexibility to schedule their study time according to their own learning pace and style, while ensuring teacher guidance and peer interaction^[5].

3.2.3. Adaptive Learning

The adaptive learning mode uses the data analysis and personalized recommendation functions of the Chaoxing platform to provide students with customized learning paths. This model can dynamically adjust the learning content and difficulty according to the students' learning behavior, progress and understanding level to meet the individual needs of students. In blended teaching, adaptive learning tools can help students get more personalized learning support in online sessions, and teachers can provide more targeted guidance and help in face-to-face teaching based on this data. The adaptive learning model is helpful to improve the learning efficiency of students and

promote teachers to carry out more accurate teaching design and intervention^[6].

4. Mixed mode application based on Chaoxing platform

4.1. Teaching effect evaluation

The teaching effectiveness evaluation using the Chaoxing platform reveals the remarkable effect of blended teaching mode in improving students' learning effectiveness. Through the platform's data analysis tools, teachers can track students' online learning behavior, including video viewing time, homework submissions, and test scores, allowing them to monitor their progress and understanding in real time^[7]. This kind of process evaluation not only helps teachers adjust teaching methods in time, but also promotes the improvement of students' learning motivation and participation. In addition, by comparing the performance of students in online and offline teaching modes, the research shows that blended teaching has obvious advantages in improving students' final exam scores, enhancing classroom interaction and promoting independent learning after class.

4.2. Platform advantage analysis

The application of Chaoxing platform in blended teaching shows its advantages in resource utilization, interactive feedback and data-driven teaching adjustment. The resource richness of the platform provides teachers with a variety of teaching resources, including electronic books, video lectures and academic materials, which not only support the deepening of the course content, but also provide students with a wide range of learning materials^[8]. At the same time, the platform's interactive tools, such as discussion boards and instant messaging functions, enhance the communication between teachers and students and enhance the interaction of the classroom. Most importantly, the data analysis capabilities of the Chaoxing platform provide teachers with in-depth insights into student learning behavior, enabling teachers to make data-based teaching decisions and achieve personalized teaching, thereby improving teaching quality and student learning outcomes. These advantages together constitute the core value of Chaoxing Platform in the blended teaching mode.

5. Challenges in the implementation process

5.1. Technology dependence

Technology dependency is a significant challenge in blended teaching models. The stability of the platform is crucial for the smooth running of online teaching, and any technical failure or platform crash may lead to the interruption of teaching activities. In addition, teachers and students must have a certain level of technical competence to effectively use the Chaoxing platform, which includes familiarity with various online tools and features. The stability of the network connection and the performance of the device also have an important impact on the online learning experience, and an unstable network or outdated device can be a barrier to learning.

5.2. Learning management

Blended teaching mode requires students to have strong self-management ability. Students need to manage their own learning pace and time without face-to-face guidance, which can be a challenge for some students. Effective time management and self-motivation are essential for successful completion of online learning tasks^[9]. At the same time, teachers also need to provide

clear guidance and support through the Chaoxing platform to help students overcome difficulties in self-management and ensure the progress and quality of learning.

5.3. Educational equity

Educational equity is an issue that needs special attention when implementing blended teaching mode. Differences in technological conditions may result in some students not having equal access to and utilization of online resources, and such differences may exacerbate educational inequalities. In addition, uneven distribution of educational resources may also affect the effectiveness of blended teaching, especially in resource-limited areas or schools. To ensure that all students benefit from blended teaching, measures need to be taken to address these inequalities, such as providing equipment support, improving network facilities or providing additional learning resources.

6. Conclusions

Through empirical analysis, this paper demonstrates the significant advantages of the hybrid teaching model based on the Chaoxing platform in improving teaching quality and learning experience. It is found that by integrating rich online resources and interactive tools, this model not only enhances the flexibility of teaching and the participation of students, but also effectively improves the teaching effect. However, the implementation process also faces challenges such as technology dependence, the requirement of students' self-management ability, and educational equity. The identification of these challenges provides theoretical basis for teaching reform and practical guidance for educators to optimize teaching design and improve teaching quality. Looking forward to the future, the research will explore the application of blended teaching mode in diverse educational environments, and pay attention to how emerging technologies such as artificial intelligence and virtual reality can further enrich teaching interaction and improve learning outcomes, so as to play a broader role in the education field and bring more efficient and richer learning experience to learners.

Acknowledgements

This work was funded by the Innovation and Quality Engineering (Talent Cultivation) Project of Guangdong University of Science and Technology under Grant CQ2020003, and the Quality Engineering Project of Guangdong University of Science and Technology under Grant GKZLGC2022022.

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