

Exploration of Curriculum Reform in the Context of Digital Empowerment: Taking the “Class Management” Course in the Primary Education Major of Higher Vocational Normal School as an Example

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Abstract: In the era of digital empowerment, the digital reform of higher vocational courses has become an inevitable trend. To explore professional curriculum reform, this study takes the “Class Management” course in the primary education major of higher vocational teachers as the research object, analyzes the importance of digital empowerment to curriculum reform, and discusses the teaching of the “Class Management” course new model and content reform plan. Digital technology empowering traditional courses is a new trend, which is both an opportunity and a challenge. This study aims to explore the application of digital technology in courses and provide certain guidelines for curriculum reform in the field of education.

Keywords: Digital empowerment; Curriculum reform; Innovative exploration

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1. Introduction

In September 2022, the United Nations Education Transformation Summit released the “Action Initiative to Ensure and Improve the Quality of Public Digital Learning for All,” calling on countries around the world to make full use of the advantages of digital technology to empower teaching and learning ^[1]. In 2023, “Digitalization of higher education” ^[2] has become one of the top ten keywords for higher education in China. In 2024, the National Education Work Conference proposed the key task of “Continuously opening up a new track for educational digitalization” ^[3]. In 2024, the theme of the World Digital Education Conference is “Digital Education: Application, Sharing, Innovation.” It can be seen that digital transformation has become an important carrier and direction of educational transformation worldwide ^[4]. With the development of society and the advancement of science and technology, digitalization has not only become an important driving force

for educational reform but also posed new challenges to the transformation and upgrading of traditional courses.

Traditional “Class Management” course teaching is mostly limited to teaching by teachers in the classroom, focusing on imparting theoretical knowledge related to primary school class management. This type of teaching model results in empty contents, single teaching forms, and disconnection between theoretical knowledge and practical training skills. It cannot meet students’ needs for the application of theoretical knowledge and improvement of practical skills, and it does not meet the expectations of the curriculum for the construction of a high-quality education system in the new era. In this context, digital exploration has injected new vitality into the “Class Management” course, providing opportunities and possibilities for reform.

2. The significance of digital empowerment in curriculum reform

To build a powerful country in education, the fundamental point is basic education, and the leader is higher education. If higher education wants to play a leading role in building a strong educational country, it must proactively plan^[5]. The advanced layout includes but is not limited to deepening the reform of education and teaching methods, promoting the integration of vocational education and general education, the integration of industry and education, and the integration of science and technology and education, so as to build a high-level talent training system.

In the context of the digital age, education and teaching curriculum reform has ushered in a new development direction, paying more attention to the practicality, flexibility, and innovation of the curriculum. Digitally empowered teaching refers to the use of digital knowledge to break through the limitations of traditional teaching methods and explore diversified teaching scenarios according to the different needs of students to achieve more efficient classrooms and high-quality teaching^[6].

Digital empowerment in curriculum reform is to introduce advanced digital technologies and tools to provide students with an education and teaching model that keeps pace with the times, aiming to cultivate students’ digital literacy, innovative thinking, and practical skills. At the same time, teachers are also required to continuously improve their digital literacy, master more teaching tools, and make full use of digital teaching resources to improve their teaching capabilities and education quality.

All in all, the significance of digital empowerment in education courses is, firstly, to break the shackles of traditional education and promote curriculum teaching to advance with the times; secondly, to enrich the teaching content, expand the teaching forms, and improve the teaching effects; thirdly, to improve teachers’ digital literacy and promote the transformation of personalized education and teaching capabilities; fourthly, to cultivate students’ digital literacy, stimulate and cultivate innovative thinking and skills; lastly, to break the geographical threshold of resources, improve the sharing of high-quality resources, and promote educational equity.

In addition, the “Class Management” course in digitally empowered schools has unique importance and functions. This course is not only a professional course for higher vocational education but also a course related to basic education and the practical training of future primary school teachers.

3. Exploration of the digitally empowered “Class Management” course

Digital empowerment refers to digital applications, such as digital tools, skills, techniques, and so on. Digitally empowered courses include the introduction of digital diversified models, the transformation of traditional teaching models through information technology, and the reshaping of educational forms^[7]. The educational environment encompasses all learning, educational, and personal development opportunities^[8]. In the digital

education environment, using digital technology to optimize teaching resources and improve the quality of education and teaching can create better conditions for students' all-round development. The digitally empowered "Class Management" course can be developed from the following aspects: digitalization of the teaching content, methods, resources, and teaching effect evaluation, and improvement of the digital sensitivity of teachers and students to achieve quantification of educational teaching, the process of interaction, and the diversity, intelligence, and fairness to teaching management and evaluation.

3.1. Digitalization of teaching content

The teaching content of the traditional "Class Management" course mainly comes from paper monographs. The theoretical knowledge is rich but relatively abstract, not only does it lack cases but practical cases are not universal enough. When students face practical problems, it is often difficult for them to apply the theoretical knowledge they have learned to solve the problems. For example, in courses such as "Emergency Handling" and "Home-School Communication," it is challenging to cope with complex and ever-changing actual situations by relying solely on theory, which also reveals the limitations of traditional teaching.

The digitalization of teaching content refers to the transformation of traditional teaching content into digital forms through information technology, including pictures, documents, videos, audios, e-books, CDs, and other electronic carriers, which can be conveniently displayed on computers, mobile phones, iPads, and other multimedia devices, for dissemination, interaction, and preservation. With the continuous advancement of science and technology, the digitalization of teaching content has become increasingly important. The construction, application, and promotion of digital teaching materials are the key development directions and necessary requirements for promoting the digitalization of teaching content.

The digitalization of teaching content has significant advantages. Firstly, it makes the acquisition, storage, use, distribution, update, and sharing of teaching content more convenient. Secondly, it uses technological means to enhance the learning experience and stimulate students' interest. Thirdly, it achieves precise teaching and enhances the efficiency of classroom teaching. Lastly, it greatly reduces the time and capital costs of printing, publishing, dissemination, etc., and improves the utilization rate of educational resources.

3.2. Digitalization of teaching methods

The "Class Management" course in higher vocational colleges is usually only offered for one semester, which means that in just 32 class hours, teachers need to complete both classroom lectures and practical internships, and students need to master theoretical knowledge and accumulate practical experience. The content is complex and the class time is limited, which undoubtedly places higher demands on teachers' teaching and students' learning. Undoubtedly, the traditional classroom "teacher, blackboard, notes, and narration" and "study groups, cases, discussion, and comments" are no longer enough to meet the training requests of practical skills talents in higher vocational majors.

The digitalization of teaching forms is an inevitable exploration of teaching methods in the digital context, bringing unlimited possibilities to break the traditional classroom form. The current widespread use of high-tech technologies such as artificial intelligence (AI), big data, cloud computing, virtual reality (VR), and augmented reality (AR) is promoting the flourishing of digital teaching models. "Class Management" classroom formats should actively attempt online education, smart classrooms, virtual classrooms, mobile learning, artificial intelligence-assisted teaching, and other digitalized forms.

- (1) Actively utilizing online education platforms: On online teaching platforms such as Rain Classroom, Micro-Teaching Assistant, Moodle, and Blackboard, teachers can upload video courses, slides, and

other teaching resources, and students can learn theoretical knowledge independently. At the same time, homework submissions, online tests, and interactive discussions are supported by these online platforms. This not only provides communication opportunities between teachers and students but increases the time and space for interaction. It not only improves the immediacy and flexibility of teacher-student interaction but also meets the large-capacity needs of the “Class Management” course, which has complex content and few class hours.

- (2) Effectively using smart classrooms and virtual classrooms to assist education and teaching training: Smart classrooms mainly use interactive whiteboards and smart classroom technology to create a dynamic and participatory classroom environment. The virtual classroom uses VR/AR technology and simulates real scenes through virtual simulation software, helping students to “immerse themselves” in handling various situations in class management. It not only helps students to understand the case but also trains students’ divergent thinking and the ability to deal with problems on the spot, providing students with immersive practical experience and helping them accumulate practical experience, which greatly improves the fun, realism, and practicality of the class.
- (3) Attempting mobile learning: Mobile learning is a kind of learning that can occur at anytime and anywhere with the help of mobile devices. It uses practical websites, programs, software, etc., as carriers to support learning content sharing and real-time teaching interaction. Combining mobile learning with “Class Management” teaching allows students to study anytime and anywhere, make full use of fragmented time, and completely break the time and space constraints in traditional classroom learning. In addition, supporting two-way interaction between teachers and students at any time is the most direct way to improve the teaching effects. It helps teachers adjust teaching strategies at any time to enhance teaching effects and can better meet students’ individual needs.
- (4) Artificial intelligence-assisted teaching technology: AI is used to conduct an in-depth analysis of students’ learning habits, progress, and potential weaknesses. Through big data computing, the intelligent system can push targeted learning materials to students. Especially in practical training courses, AI can quickly identify students’ weak abilities, such as language organization, expression ability, theory, application, adaptability, etc., based on how students respond to actual cases, so as to achieve targeted tutoring for students. This not only saves time significantly but also improves learning efficiency.

All in all, through the comprehensive application of these digital teaching methods, it can not only improve the teaching quality of the “Class Management” course, teachers’ teaching effectiveness, and students’ learning efficiency, but also enhance teacher-student interaction and create a more harmonious learning atmosphere in the course.

3.3. Digitalization of teaching resources

Digitalization of teaching resources refers to the use of digital technology to gather, share, and optimize various teaching resources. As a result, teachers can easily obtain teaching resources such as lesson plans, courseware, and videos, and at the same time share the resources with students, providing students with more diverse, rich, and comprehensive learning resources. In view of the fact that the practical part of the “Class Management” course is short but requires high practical skills, the effective integration of digital resources is of great significance in providing students with practical teaching cases and objective data support. The integration of resources through digital means will not only bring about an increase in quantity but also lead to uneven quality, which requires teachers to screen quality resources and improve their effective utilization.

3.4. Digitalization of teaching effect evaluation

The digitalization of teaching effect evaluation is to quantify the teaching effect through digital technology. The types of new curriculum teaching evaluation include diagnostic evaluation, formative evaluation, summative evaluation, process evaluation, etc. Undoubtedly, the traditional “paper examination, manual scoring, entry system” cannot meet the needs of new course teaching evaluation. Through the digitalization of teaching forms, teachers can monitor the teaching process, grasp students’ learning progress, report and display results at any time, and provide feedback on problems during the course, providing a basis for adjusting teaching strategies. Students can also clearly grasp the direction of their own efforts and improvements based on the teaching evaluation. It can be seen that the digitalization of course assessment is more conducive to the optimization and upgrading than the original traditional courses, the grading is more multidimensional, clear, and timely, presenting the basic situation of the course.

3.5. Cultivation of teachers’ and students’ digital acumen

Improving the digital acumen of teachers and students is the basis for the digital reform of the “Class Management” course. Only when teachers and students have high digital acuity, are willing to accept digital teaching models, take the initiative to contact, actively interact, continue to learn, and develop good application habits, can digitalization be fully integrated into teaching content, teaching models, and teaching evaluation.

4. Challenges of digital empowerment in curriculum reform

Digital empowerment in curriculum reform is a development trend and a long process; it is full of opportunities and challenges. To achieve digital empowerment in curriculum reform, it is necessary to analyze and respond to the problems and challenges from multiple levels such as technology, resources, and culture.

From a technical perspective, the acceptance, usage, adaptation, and mastery of digital equipment and software carriers by teachers and students directly determine the process of digital course reform. For teachers, there are many challenges of digitalizing the “Class Management” course. Firstly, there exist problems in the construction of the course resource databases, how to select the best teaching resources from the collection of traditional resources and digital resources; secondly, teachers not only should master and be familiar with using online teaching platforms themselves but they should also be able to guide students to do the same. For students, the challenges of digitalizing the “Class Management” course are how to quickly master the use of digital teaching software and obtain powerful and personalized development resources to avoid blindly wasting time by looking for a needle in a haystack. Therefore, only teachers and students can cope with the challenges brought by technological updates and make digital technology truly serve education and teaching.

From a resource perspective, the biggest challenge in the reform of the digitally empowered “Class Management” course is the rational allocation and optimal utilization of resources. That is, it is necessary to fully tap into and reasonably obtain more diverse high-quality resources, and optimize their allocation to meet the different personalized needs of teachers and students, thereby promoting resource sharing and educational equity. Another challenge is the experience of using resources. The introduction of digital educational resources aims to enhance teachers’ teaching experience and effectiveness and meet students’ individual learning needs. Many practical cases of traditional “Class Management” are narrated by teachers, and then students think about how to deal with the cases, discuss and analyze them, and lastly, teachers give instructions to students. Such case explanations lack a sense of presence and personal experience for students, and it is difficult for students to prepare to master interpersonal relationships and language to the details such as expression and communication methods. Students who can answer theoretical questions fluently are often helpless when encountering problems

in practice. Although the introduction of digital resources has enriched teachers' teaching cases, how teachers choose cases that match their real practical experience can make the connection between the lesson plans and the curriculum closer, and the guidance to students will be more targeted^[9]. In short, by integrating high-quality digital resources, optimizing resource allocation, and solving problems such as uneven resource distribution, we can provide students with a better learning environment and opportunities.

At the cultural level, the primary task of promoting the development of digital education concepts and improving digital literacy is to transform the traditional educational thinking model and enhance the awareness of educational innovation. In the process of digitally empowered "Class Management" course reform, teachers' role is crucial, and they need to first improve their own digital concepts. However, the challenge lies precisely in how to abandon and deconstruct the traditional fixed thinking of "experiences talking." Especially for older teachers, they need to be courageous in accepting and adapting to novel teaching concepts, learn new teaching tools, and avoid falling into a complacent situation. Teachers need to deeply explore students' individual needs and development potential, proactively innovate personalized teaching models, and continue to cultivate students' critical thinking and innovation abilities. In short, actively integrating traditional classrooms into the digital era, exploring teaching directions, learning digital skills, accepting new concepts and innovative teaching models are the directions we should strive for. Only in this way can we cultivate more digitally literate talents for future society.

In summary, opportunities and challenges coexist in digital empowerment curriculum reform. However, it has significant development impetus and broad development space for teachers and students. It can be seen that actively responding to the challenges of technology, resources, and culture will help promote the digital reform of the curriculum, thereby assisting the digitalization process of education in our country.

5. Strategies to cope with the challenges of digitally empowered curriculum reform

The "Class Management" course is only one of many professional courses and faces many challenges in the digital curriculum reform. To deal with these challenges, we explore coping strategies from three aspects: school support, teacher efforts, and student integration.

In terms of school support, to realize the digital reform of the "Class Management" course, the school needs to provide corresponding digital technology, multimedia equipment, and information platforms, such as an online course resource library, course evaluation system, etc. In addition, schools should focus on digital training and guidance for teachers to improve teachers' information technology literacy and curriculum design capabilities, such as inviting digital information technology personnel to give relevant lectures. At the same time, schools should also actively carry out exchanges and cooperation in school-level digital education and teaching, introduce advanced curriculum concepts and management models, and promote experience sharing among teachers. In short, schools should start from the layout of educational concepts and broaden the thinking mode of running schools.

In terms of teacher efforts, in order to promote curriculum reform, teachers, as the leaders of the curriculum, should start from themselves. Teachers are the key to curriculum reform. They need to actively cultivate and improve one's own digital literacy, and proactively adapt to the development of the digital information age. During this process, teachers should regularly participate in courseware production training and online platform operation training, and pay attention to digital information technology lectures to continuously improve their information technology level. At the same time, teachers should focus on the needs of students and understand the needs of primary school teacher talent cultivation, with the training goal of

improving students' professional competence, and with the orientation of improving students' practical skills and job matching. Through students' feedback on the courses situation, learning interests and proficiency in the use of teaching resources, etc., teachers should evaluate the gap between students' practical skills and the needs of future teaching positions, and improve the curriculum plan in a more targeted manner. In the teaching process, teachers should be proficient at using digital tools, such as online education platforms, teaching applications, etc., to improve teaching effects. In addition, teachers should pay attention to educational equity when organizing and rationally utilizing resources, and promote the maximization and accuracy of educational resource sharing, so as to achieve the goal of educational equity.

From the perspective of students, they are the biggest beneficiaries of education reform. Students should fully understand themselves, including career positioning, learning situation, skill limitations, etc., establish correct learning concepts, make full use of digital resources, actively participate in classroom discussions, maintain good interactions in the course, improve self-learning ability, and actively expand knowledge fields. Students should also participate in online and offline activities and give full play to the benefits of shared education resources to improve personal overall quality.

In short, in the process of responding to the challenges of the digital curriculum reform of the "Class Management" course, schools, teachers, and students need to cooperate at multiple levels. Through continuous improvement of reform strategies, the teaching quality of the "Class Management" course will be continuously improved.

6. Conclusion

All in all, curriculum reform in the context of digital empowerment is of great significance with the goal of improving the quality of education and cultivating innovative talents. This article takes the "Class Management" course as an example to explore digital curriculum reform, innovate teaching models, improve teaching effects, and promote the in-depth development of curriculum reform. Future curriculum reform is an inevitable trend in education development and reform. The process is full of opportunities and challenges. Teachers should be able to lead students to actively face challenges, break through the shackles of traditional educational concepts, and constantly explore positive coping strategies. Only in this way can education and teaching continue to be promoted, develop towards digitalization, promote educational equity, and lay the foundation for cultivating qualified talents with core competencies.

Disclosure statement

The author declares no conflict of interest.

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