© 2024 The Authors.

This article is published online with Open Access by IOS Press and distributed under the terms of the Creative Commons Attribution Non-Commercial License 4.0 (CC BY-NC 4.0).

doi:10.3233/FAIA241174

# Research on the Practice Path of Civic and Political Innovation Course Based on Mobile Cloud Teaching Under the Background of "Internet+"

Oi YANGa,1

<sup>a</sup>Wuhan Huaxia Institute of Technology, Wuhan 430223, China

Abstract. Teachers of ideological and political theory courses are updating their teaching concepts to embrace new methods, focusing on enhancing media literacy through mobile cloud teaching. This study proposes an innovative approach to integrating mobile cloud platforms deeply into teaching methods under the "Internet+" framework. It emphasizes optimizing teaching designs, creating collaborative network environments, and using big data to enhance teaching effectiveness. Results show significant improvement in teaching effectiveness, with the "China Series" course receiving high praise from students. Overall, educators can use technologies like the "Blue Ink Cloud Class" to refine teaching practices and continuously improve their approach.

**Keywords.** Civic and political theory course; cloud teaching; classroom teaching; information technology; practice path

# 1. Introduction

The ideological and political theory courses in colleges and universities to solve the above reasons, must be guided by the spirit of the speech of General Secretary in the national conference on ideological and political work in colleges and universities, "should be transformed according to the events, advancing according to the times, and new according to the situation" [1]. The emergence of mobile cloud teaching for the reform and innovation of the teaching mode of ideological and political theory courses in colleges and universities has optimized the path choice. So, how to recognize the role of mobile cloud teaching to promote the teaching reform of ideological and political theory courses, realize the major changes in the teaching of ideological and political theory courses, and guide students to use cell phones to carry out theoretical and practical teaching, in-class and extracurricular teaching, online and offline teaching, has become a major issue that needs to be solved in the era of mobile cloud. Mobile cloud teaching refers to the organic combination of the Internet and cloud computing, big data, in order to guide students to use the mobile client to carry out teaching in the form of organization, it is a set of teaching tools, teaching content, teaching management and evaluation as one

<sup>&</sup>lt;sup>1</sup>Corresponding Author: Qi YANG 13429993599@163.com

of the cloud technology and big data teaching process. The extensive use of mobile cloud teaching has brought new challenges to the teaching of ideological and political theory courses in colleges and universities.

The ideological and political theory class under the perspective of mobile cloud teaching faces the tendency of dissolving theoretical authority [2]. The important carrier of mobile cloud teaching is the popularization of the Internet, according to statistics, the total number of Chinese netizens is 751 million, among which the scale of cell phone netizens reaches 724 million, and the penetration rate of cell phones among college students reaches 100% [3]. Under the traditional teaching mode of ideological and political theory class, teachers occupy the absolute right to speak, and the theoretical interpretation is characterized by "systematic", "comprehensive" and "authoritative". Under the perspective of mobile cloud teaching, everyone is a self-media, and they all have the right to speak, and the theoretical knowledge is characterized by "fragmentation", "network" and "entertainment", so students are unable to learn Marxist theory. The learning of Marxist theory can't achieve the systematic knowledge, coupled with the impact of diversified ideas on the mainstream ideology, resulting in students' resistance to the theoretical authority or even mistrust, and the theory's inherent authority, systematic, scientific and so on to varying degrees by the disintegration of the theory, which brings a real challenge to the teaching of ideological and political theory courses [4].

# 2. The research methodology

(1) Change the teaching concept, improve the media literacy of teachers and students in mobile cloud teaching. The development of mobile cloud teaching, so that the ideological and political theory course teaching from the traditional offline lectures, expanding to the new media environment of the network online learning, changing the ideological and political theory course of the ecological environment, "the teacher and the student is not a simple transmission of knowledge, but the processing and conversion of knowledge", teachers and students in the network environment, in the information reception, dissemination, generation are in a position of reciprocity. Teachers and students in the network environment, in terms of receiving, dissemination and generation of information are in a reciprocal position. Therefore, teachers should change the one-way teaching concept of "indoctrination" in traditional teaching, play the leading role of teachers, and be the guide and leader of students' thoughts. Different from the traditional teaching mode, mobile cloud teaching puts forward higher media literacy requirements for teachers' "teaching" and students' "learning". On the one hand, teachers should carry out in-depth processing and processing of all kinds of teaching resources from the level of the integrity of the teaching content, the feasibility of the teaching design, the effectiveness of the teaching effect, and so on, so as to enhance the affinity and infectious force of the teaching of ideological and political theory courses. "To realize the transformation of ideological and political education space from closed to open, from static to dynamic, from abstract to concrete, and to effectively expand the capacity of the ideological and political education library in colleges and universities". On the other hand, the huge amount of information has led to the fragmentation of students' reading, the superficialization of problem analysis, and some violent and pornographic information, even leading to the blurring of students' cognition and the dereliction of moral behavior. In view of this, students should improve their ability to identify information and make value judgments, strengthen their political beliefs, consciously resist the influence of western corrupt ideas and improve their spiritual realm.

(2) Optimize the teaching design and innovate the teaching form of the deep integration of mobile cloud teaching platform and ideological and political theory course. Ideological and political theory course of educational attributes and ideological and political attributes of the function of the play, the key depends on the teacher's teaching design, "as a classroom teaching designer, teachers should stand in the 'guide' height to grasp the direction of the course teaching, in particular, to grasp the political direction". First, the design of teaching content, should follow the principle of teaching and learning. Teachers should change from the main body of "teaching" to the main body of student "learning", so that students really learn, really understand, really believe the basic content of Marxist theory; teachers should integrate all kinds of teaching resources, the establishment of the cloud teaching platform required by the test question resource base, teaching courseware resource base, Teachers should integrate all kinds of teaching resources, establish test question resource bank, teaching courseware resource bank, video and case resource bank needed by the cloud teaching platform, so as to meet the online learning needs of students [4]. Secondly, the form of teaching organization, integrated planning, hierarchical promotion. Mobile cloud teaching can effectively realize online and offline, inside and outside the classroom blended teaching, teachers should take into account the systematic nature of the pre-course, in-class and post-course teaching links, pre-course learning to be interesting, in-class exploration to be orderly, post-course enhancement to be effective. Relying on the artificial intelligence and big data of mobile cloud teaching, we can realize real-time monitoring and timely supervision of students' online learning, effectively analyze and manage their learning behaviors, and realize the dataization and networkization of the teaching process.

# 3. Analysis of results

- 3.1 Advantages of Cloud Teaching Platform Technology in the Teaching Operation of Civics and Political Science Courses
- (1) Functions of "Blue Ink Cloud Class" based on smartphones. Internet technology is changing with each passing day. Smartphone technology platforms have leapt from 3G to 4G, and there is still no end to room for improvement in the future. Young students are keen on new things and are very fond of electronic products, smartphones, etc., which has promoted smartphones to gradually replace traditional PCs [6]. Mature information technology is reprocessed and recombined through elements and used as a new classroom teaching method in related course teaching, which can achieve twice the result with half the effort, and even become a means and method for school academic management.

In the multi-dimensional response to teacher-student interaction on the "Blue Ink Cloud Class" technology platform, the functions are mainly reflected in the check-in function, message notification function, relevant knowledge resource sharing function, as well as timed tests, polls and questionnaires, homework group tasks, brainstorming, Q&A discussions, and other functions, and there are also special evaluation assessment and reward functions. These functions are able to break the time and space limitations of

traditional teaching paths and methods, and can meet the young people's psychology of identification with information technology.

- (2) Teachers and students in the Civics class teaching experience of using the "blue ink cloud class" platform of a vocational and technical college of construction engineering school 16 two classes made a questionnaire survey, 89% of the students believe that the use of the cloud teaching form of teaching effect has been significantly improved. Through the communication between teachers and students, they realized that it is a good teaching aid [7]. Civics class is politically strong, large amount of information, and closely integrated with real life, there is an urgent need for teachers and students to have a wide range of time and space communication and interaction, only in this way can meet the objectives of the Civics class teaching. Through the five modules of "Blue Ink Cloud Class" platform, including class details, member information, class resources, class activities and notification module, the effectiveness of "flipped classroom" teaching mode can be realized with the span of time and space.
- (3) The feedback mechanism of the Civics class in the cloud teaching process In the summary of the Civics class using the "Blue Ink Cloud Class" platform, we can intuitively experience the feedback mechanism of the "flipped classroom" mode of the teaching process. This in itself reflects the nature of interactive feedback of knowledge and information. This feedback mechanism enables teachers to efficiently implement their own teaching programs and objectives, and students to conveniently grasp the teacher's teaching tasks and knowledge. This is shown in Figure 1.



Figure 1. Teacher-student interaction feedback mechanism of the "cloud classroom" platform

In Figure 1, the solid line box in the center refers to the teaching activities in the classroom, and the dashed line box refers to the activities operated entirely by the "cloud classroom" platform. Of course, there are also some interactive activities in the classroom teaching activities in the center solid line box. This figure reflects the teaching process and flow of teachers to students through the "Cloud Classroom" platform and the real classroom venue, and also reflects the interactive feedback mechanism for teachers and students through the combination of the "Cloud Classroom" platform and classroom teaching. Teachers through the "cloud class" in the classroom before the release of information, pre-study, classroom lectures and Q&A, and combined with the "cloud class" platform interactive activities, to ensure a good teaching atmosphere and effect, and finally in the "cloud class Finally, the teacher assigns homework and tasks after class on the "cloud class" platform. Teachers play the role of the chief designer and director of the activities, grasp the time and space conversion, so that the burden of teaching and learning tasks are balanced, online and offline are coordinated, and classroom teaching activities and extracurricular learning tasks are matched. Through the quantitative experience value and related statistics, students and teachers intuitively understand the teaching effect and learning dynamics at any time, and clearly recognize the positive and negative feedback effect of the teaching process [8].

# 3.2 Integration of information technology into the planning of the Civics teaching curriculum system

Digital literacy is impacting course design, professional development and student-facing services and resources. The planning of the ideological and political teaching curriculum system is also a design system composed of multiple elements. In the final analysis, information-based education must integrate digital literacy into the entire teaching system. By creating more convenient teaching conditions, improving diversified teaching methods, and taking the formation of staged learning results as the guide, the concept of "paying equal attention to learning and teaching" is formed in the process of ideological and political course teaching reform, promoting each discipline to lead the subtle value of "Transformation". Deeply promoting practical innovation research on ideological and political education based on new thinking, new technologies, new media, new resources, etc., and strengthening integrated research on the interactive integration of theory and technology have significant practical significance for improving and upgrading the ideological and political teaching curriculum system [9]. Corresponding to the reform context of foreign information-based teaching construction, it can be seen that in the planning of teaching curriculum system, more attention is paid to grasping the constructivist learning concept, making students become active constructors of knowledge, and promoting students' autonomy in learning and moral, mental, and emotional development. develop.

In the process of reforming the Civics and Political Science course in domestic colleges and universities, we have continuously explored and found that the content design of the course is applicable to the main channel of teaching in the classroom and the course planning system with school-based characteristics. Civic and political thought course" is actively shifted to "course of political thought", a city as "course of political thought" implementation of the pilot, and actively introduced "a city college "course of political thought "Education and Teaching System Construction Special Program". After the "China Series" course is online, it has received wide popularity and high response from students. The opening of the course not only conforms to the trend of the development of the times and closely follows the topics of concern to students, but also contains rich academic value and meets the knowledge demand of students, which inspires young students to continuously gather patriotic heart and transform it into the act of serving the country [10].

Colleges and Universities	Course	Faculty	Methods	Value Leadership
University A	The Great Powers Strategy	Gathering the top faculty team, a strong transfer team to organize and carry out thematic teaching, each topic lectures lecturers are leaders in the industry	Focusing on pioneering and innovation, based on information technology, integrating classroom lectures, on-site answers, online interaction, classroom feedback and other teaching methods  (a) Skillfully incorporating the essence of socialist core values into diversified classroom teaching and emphasizing invisible education	
University B	Governance Reading China			incorporating the essence of socialist core values into diversified classroom teaching and emphasizing
University C				
University D	The Chinese Way			
E University	Wendo China			

The construction experience of a certain city provides a useful reference for universities to accelerate the reform of the ideological and political reform of the curriculum. Exploring the teaching reform of ideological and political theory courses, comprehensive literacy courses, and professional courses continuously injects the Chinese spirit, Chinese values, and Chinese power, achieves the teaching goal of combining value shaping, ability cultivation, and knowledge transfer, and enhances the teaching effect and influence of ideological and political education through the in-depth integration of information technology.

# 3.3 The design of teaching models applying new information technologies, the

The innovation of teaching mode based on information technology constantly impacts the traditional classroom teaching mode, the use of mobile terminals, the application of network teaching platforms, it is easy to see that online learning, mobile learning and blended learning has become a big trend, and the teaching of the Civics class in colleges and universities should make full use of the advantages of information technology and the deep integration of teaching to explore the design of a new type of information technology teaching mode, to achieve the innovation of the teaching means, teaching content, teaching organization and other aspects of the teaching process. The teaching method, teaching content, teaching organization and other aspects of the process of innovation. In the information technology environment, the teacher's task has changed, from the "sage on the podium" to the "guide around", and students need to be counseled and guided in exploring new areas and acquiring specific skills on their own. By focusing on the phases of teaching and learning: pre-class, classroom, and post-class, and by placing teachers and students in a satisfying IT-enabled environment, it is possible to teach more efficiently, to grasp data on learner behavior, to analyze the state of learners' learning, and to anticipate the reasonableness of teaching strategies. From the teaching mode design sketch shown in Figure 2, by analyzing the fit between information technology and classroom teaching, setting the corresponding teaching objectives in combination with the characteristics of the subject, and placing teachers and students in the information technology environment, a clear process, high applicability, and flexible use of the classroom teaching mode is constructed. In the course development stage: teachers make full use of the new information technology to develop teaching resources to assist teaching, and need to have the ability to skillfully use the technology combined with the teaching focus to complete the basic knowledge required for the course teaching design. In the classroom teaching stage: guiding and encouraging students to carry out inquiry-based learning and create certain scenarios to provide students with personalized guidance to ensure the integrity of the teaching content. In the post-class extension stage: internalize and transfer the knowledge taught in the classroom, summarize the experience and shortcomings in the actual teaching process, provide timely feedback on the completion of students' post-class tasks, analyze students' learning dynamics with the help of the online teaching platform, and improve the teaching effect.

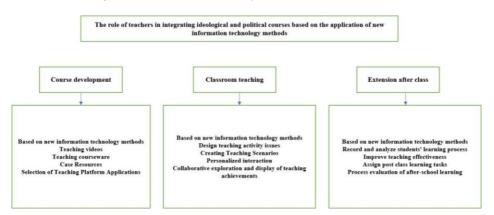


Figure. 2 Teaching model design based on the application of new information technology tools integrated into the Civics course

## 4. Conclusion

With the rapid advancement of education informatization, integrating information technology into the reform of ideological and political courses is crucial. This integration should be aimed at enhancing the relevance and effectiveness of ideological and political education through mutual promotion. Only when information technology is fully integrated with curriculum concepts, systems, teaching modes, and evaluation methods can it truly enhance the appeal and effectiveness of traditional ideological and political classrooms. Otherwise, technological upgrades risk being mere tool substitutions rather than fostering a teaching revolution.

## References

- [1] Yun, G., Ravi, R. V., & Jumani, A. K. (2023). Analysis of the teaching quality on deep learning-based innovative ideological political education platform. Progress in Artificial Intelligence, 12(2), 175-186.
- [2] Mo, B., & Ming, C. (2022). Research on network ideological and political innovation in colleges and universities in the post-epidemic era. Int. J. Soc. Sci. Educ. Res, 5, 55-62.
- [3] Huang, B. (2022). Exploration on the Optimization of the Path of Network Ideological and Political Education in Colleges and Universities Based on the E-Class Platform. Curriculum and Teaching Methodology, 5(7), 125-130.
- [4] Zhang, D., & Wang, S. (2021). Analysis on the dynamic control strategy of college students' thinking based on the background of mobile multimedia. Transactions on Comparative Education, 3, 47-56.
- [5] Ma, R., & Chen, X. (2023). Intelligent education evaluation mechanism on ideology and politics with 5G: PSO-driven edge computing approach. Wireless Networks, 29(2), 685-696.
- [6] Lyu, Y. (2024). Practical Exploration of Ideological and Political Education Work of College Students in the New Era. Contemporary Education and Teaching Research, 5(6), 217-222.
- [7] Zhu, W., Liu, X., & Seong, D. (2023). Educational innovation in higher education: Role of innovative competencies, learning environment, student readiness and ideological and political education. Educational Administration: Theory and Practice, 29(1), 178-197.
- [8] Zixuan, P. Literature Review on Intelligent Media of Ideological and Political Education. Academic Journal of Humanities & Social Sciences, 5(5), 10-17.
- [9] Wang, X., Zhao, S., Liu, J., & Wang, L. (2022). College music teaching and ideological and political education integration mode based on deep learning. Journal of Intelligent Systems, 31(1), 466-476.
- [10] Zhou, Z., & Liu, Y. (2023). Political teaching application in high vocational care courses based on machine learning systems. Soft Computing, 27(11), 7657-7666.