

Research on Digital Empowerment of Integrating Red Culture Resources into College Ideological and Political Courses

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Abstract. Red culture resources are an important testament to the century-long struggle of the Communist Party of China, embodying profound revolutionary spirit and educational value. With the rapid development of digital technology, digitally empowering red culture resources has injected new vitality and opportunities into college ideological and political courses. This study discusses the deep integration of red culture resources with ideological and political courses driven by digital technology. It explores the logical framework for incorporating red culture into these courses and analyzes the pathways of digital technology in the dissemination and utilization of red culture resources. The goal is to enhance the quality of ideological and political education in college curricula.

Keywords: Digital Empowerment; Red Culture; Ideological and Political Courses.

1. Introduction

With the rapid development of information technology, digital technology offers new platforms and mediums for the dissemination and utilization of red culture resources. In today's digital era, leveraging digital technology to innovatively present and spread red culture resources empowers college ideological and political courses. This approach not only enhances the visual appeal and interactivity of teaching but also effectively deepens students' understanding and emotional connection to red culture[1]. These "vivid" digitalized red culture resources breathe new life into the revolutionary history and spirit, providing more dynamic content for ideological and political courses, thereby increasing their attractiveness and effectiveness.

2. The Logical Framework for Digitally Empowering Red Culture Resources in College Ideological and Political Courses

As a spiritual treasure of the Chinese nation, red culture carries the revolutionary spirit and valuable legacy of national self-strengthening. In the context of the new era, how to leverage digital technology to empower red culture resources and integrate them into college ideological and political courses has become a key issue in college ideological and political education. The integration of digital red culture resources into college courses must follow certain logical principles[2]. This discussion will focus on three main aspects: content selection, educational instruction, and humanistic care.

2.1 The Logical Framework for Content Selection in Digitally Empowering Red Culture Resources into College Ideological and Political Courses

The selection of red culture content is the logical starting point for integrating red culture resources into college ideological and political courses. Faced with an abundance of red culture resources, choosing content that holds educational value and resonates with students is the primary logic that course design must follow. While digital technology enables the preservation and dissemination of red culture resources, the selection process must remain precise and refined to ensure the deep integration of red culture into the curriculum.

2.1.1 Precision in Content Selection

The powerful information processing capabilities of digital platforms can effectively address the traditional limitations of red culture education, such as monotonous content and presentation[3]. However, when choosing red culture content for college ideological and political courses, it is essential to focus on core materials that directly impact students' ideological development and values. Key historical events from the revolutionary era, the inspiring stories of heroic figures, and the enduring strength of faith in red culture should be prioritized. By leveraging big data filtering and classification technologies, the most representative and educationally significant content can be selected from the vast array of red culture resources.

2.1.2 Integration of Diversity and Systematic Principles

Digital technology greatly enhances the variety of red culture content presentation, utilizing audio, video, animation, and virtual reality to make red culture more vivid and engaging for students[4]. However, the design of ideological and political courses must not only emphasize diversity but also consider the systematic structure of the content. Technologies such as knowledge mapping and thematic pathways can be employed to build a structured framework for red culture within the curriculum. For example, red culture resources can be presented in stages and by themes according to historical timelines, allowing students to progressively understand red culture in a logical learning process, thereby strengthening their cultural and ideological identity.

2.1.3 Refined and Contextually Appropriate Design

When integrating digitized red culture resources into courses, it is crucial to ensure refined design and appropriate content presentation. Digital empowerment is not merely about converting resources into digital formats; it also requires design and technological innovation to tailor red culture content to different teaching contexts. For instance, when designing online learning materials, red culture's historical narratives can be linked with current societal issues and topics of interest to students, making the courses more engaging and relevant[5]. Through personalized learning platforms and AI recommendation systems, customized red culture learning resources can be provided to students of different grades, interests, and learning levels, thus improving the effectiveness of ideological and political education.

2.2 The Educational and Teaching Logic for Digitally Empowering Red Culture Resources in College Ideological and Political Courses

Digital technology provides powerful tools for integrating red culture into college ideological and political courses, but achieving effective teaching outcomes still requires adherence to basic educational and teaching logic[6]. As a crucial component of ideological and political education, the transmission and educational function of red culture must be effectively realized through scientific teaching design and innovative educational models. Digital technology can transform traditional classroom teaching models by enhancing participation and appeal through intelligent, interactive, and multimedia means.

2.2.1 Horizontal Collaboration and Vertical Continuity in Teaching Content

When integrating red culture resources into college ideological and political courses, it is essential to consider both horizontal collaboration and vertical continuity between different knowledge themes. Red culture spans a wide range of knowledge, including history, politics, economics, and culture. Therefore, course design should utilize digital platforms to achieve interdisciplinary content integration and collaborative teaching. For instance, online teaching platforms can unify red culture content across different disciplines to form a multidisciplinary red culture education system, breaking down traditional subject barriers and achieving comprehensive educational outcomes. Additionally, teaching content should be arranged progressively and logically based on students' cognitive development, ensuring that students of different grades and stages can gradually deepen their understanding and recognition of red culture.

2.2.2 Innovation in Immersive and Interactive Teaching Modes

The empowerment of digital technology offers endless possibilities for innovation in teaching modes for ideological and political courses. Technologies such as virtual reality (VR), augmented reality (AR), and interactive games allow students to experience historical scenes of red culture, immersing themselves in virtual revolutionary battlefields or historical events. This immersive learning approach not only enhances students' interest but also deepens their understanding of the spirit of red culture through sensory stimulation and emotional resonance. Additionally, digital platforms can employ interactive teaching modes, such as online discussions, instant feedback, and question prompts, to increase student engagement, facilitate interaction between teachers and students, and improve teaching effectiveness.

2.2.3 Personalized and Data-Driven Teaching Feedback

Leveraging big data and artificial intelligence, digital platforms can provide personalized learning paths and feedback mechanisms for each student. By analyzing real-time learning data, platforms can help teachers understand students' learning progress and comprehension, allowing for timely adjustments to teaching content and methods. At the same time, students can use the personalized recommendations provided by the platform to select suitable red culture learning resources for self-directed study and improvement. This data-driven teaching model moves away from a one-size-fits-all approach, enabling truly individualized instruction.

2.3 The Humanistic Care Logic for Digitally Empowering Red Culture Resources in College Ideological and Political Courses

Ideological and political courses are not just about imparting knowledge but also about caring for and guiding students' lives. The educational value of red culture must be realized through a close connection with students' life experiences to effectively play its role in ideological guidance[7]. Digital empowerment provides more possibilities for integrating red culture into students' daily lives, allowing them to experience the power of red culture both inside and outside the classroom.

2.3.1 Contextualized Educational Practice

Digital technology extends the dissemination of red culture resources into a wide range of everyday scenarios. Through mobile applications, short video platforms, and social media channels, red culture resources can be presented in more relatable forms to students. For instance, designing red culture check-in activities related to specific courses, online challenges, and AR real-life experiences can integrate students' learning processes with everyday life, enabling them to continuously engage with and appreciate the essence of red culture in their daily routines. Additionally, digital platforms can closely connect campus red culture resources with students' daily lives, such as creating red culture-themed campus maps and organizing online red culture lectures, further enhancing students' sense of participation and immersion.

2.3.2 Deep Integration and Innovation in Course Practice

Red culture education in ideological and political courses should go beyond theoretical instruction and leverage digital means to deeply integrate practice into the curriculum. For example, during course training, students can be organized through online platforms to participate in virtual red culture research projects, red culture online dissemination activities, and incorporate red culture-related practices into extracurricular activities. This approach allows students to engage deeply with red culture during their spare time and actively participate in its transmission and promotion. Such in-depth practice not only deepens students' understanding of red culture but also effectively enhances their sense of social responsibility and practical skills.

3. Pathways for Digitally Empowering the Integration of Red Culture Resources into College Ideological and Political Courses

In the process of integrating digital red culture resources into college ideological and political courses, choosing the right pathways is crucial. Effectively utilizing technological means to enhance course appeal and educational effectiveness is an important issue in current ideological and political course construction. To achieve this goal, it is necessary to comprehensively consider the historical, educational, and innovative aspects of red culture, fully utilize digital technology, integrate red culture resources organically into the teaching process, and establish a multi-dimensional curriculum system. Here are several feasible pathways[8].

3.1 Optimization of Red Culture Teaching Resources Based on Big Data Analysis

Big data technology provides strong support for the integration and optimization of red culture resources in colleges. By analyzing big data, institutions can understand students' learning preferences, knowledge mastery, and learning outcomes, providing a basis for adjusting and optimizing teaching content. Specifically, colleges can establish a big data-based red culture teaching resource management platform that collects various red culture resources such as historical documents, revolutionary spirit, and revolutionary sites for teachers to select and use.

In course design, teachers can use data-driven insights to select red culture content suitable for students. For instance, students interested in practical activities might benefit from virtual visits or field research of revolutionary sites, while students who prefer reading could be recommended red classic books or in-depth historical documents. By analyzing these data accurately, schools can achieve personalized content customization, enhancing students' interest in learning red culture.

Additionally, big data technology can help monitor teaching effectiveness. By continuously tracking and analyzing students' learning data, schools can promptly identify issues and adjust teaching content or methods. This ongoing optimization process ensures that the integration of red culture resources into ideological and political courses is more scientific and efficient.

3.2 Application of Virtual Reality and Augmented Reality Technologies

Virtual reality (VR) and augmented reality (AR) technologies provide new perspectives for the digital presentation of red culture resources. These technologies can present historical events, revolutionary scenes, and revolutionary figures in realistic 3D forms, greatly enhancing students' immersion and engagement. Through VR technology, students can "experience" revolutionary historical scenes and "interact" with revolutionary figures, deeply understanding the essence of red culture.

For example, colleges can develop a red culture VR teaching system where students, wearing VR devices, can enter virtual scenarios of major historical events like the Long March, the Anti-Japanese War, or the Liberation War, experiencing the hardships faced by revolutionaries and their indomitable spirit. This comprehensive immersive experience helps students better understand red culture and improves their historical cognition and cultural identity.

AR technology can also enrich red culture teaching. With AR, students can access red culture information anytime and anywhere in their daily lives. For instance, students can scan photos of revolutionary sites with their phone cameras to see related historical events, character introductions, and more, deepening their understanding and recognition of red culture. AR can also integrate digital information with physical spaces such as revolutionary sites and red memorial halls, allowing students to experience the charm of red culture in real life.

3.3 Building an Interdisciplinary and Multi-Level Red Culture Ideological and Political Curriculum System

Integrating red culture resources into ideological and political courses requires not only rich teaching resources and advanced technological support but also a systematic and scientific

curriculum framework. Colleges should build an interdisciplinary and multi-level curriculum system, incorporating red culture into various courses and making it an organic part of ideological and political education.

An interdisciplinary red culture curriculum system can integrate red culture content with knowledge from other subjects. For example, in history courses, students can learn about the historical background of revolutionary wars and their impact on China's modernization process; in literature courses, they can analyze revolutionary sentiments and spiritual worlds in red literature; and in art courses, they can appreciate artworks themed on red culture. This interdisciplinary teaching approach allows students to understand red culture from multiple perspectives, enhancing their cultural literacy and aesthetic ability.

Simultaneously, colleges should establish a multi-level red culture ideological and political curriculum system to provide courses suitable for different grades and majors based on their cognitive levels and learning needs. For lower-grade students, basic red culture courses like "Introduction to Red Culture History" and "Revolutionary Spirit" can be offered, while advanced courses such as "Red Culture and China's Modernization" and "Red Culture and Globalization" can be provided for higher-grade students. This tiered curriculum system effectively deepens students' understanding of red culture and helps them develop correct values and worldviews.

3.4 Multi-Party Cooperation Mechanism

To effectively integrate red culture resources into college ideological and political courses, constructing a multi-party cooperation mechanism is also key, alongside technological support and curriculum innovation. Collaboration among government, enterprises, social organizations, and colleges can form a positive mechanism for societal involvement in red culture education, promoting the ongoing inheritance and development of red culture.

3.4.1 Government Policy Guidance and Financial Support

The government plays a crucial role in promoting the digital integration of red culture resources into college ideological and political courses. First, the government can provide policy guidance to define the strategic position of red culture resources in ideological and political courses. For example, relevant educational policies can be introduced to include digital red culture teaching in the assessment criteria for college ideological and political course construction, encouraging colleges to actively innovate red culture education.

Secondly, the government can provide financial support for the digitization of red culture resources. Developing digital red culture resources requires substantial funding, including data collection, technology development, and platform construction. The government can establish special funds to support collaboration between colleges and technology enterprises in developing digital red culture platforms, promoting the sharing and dissemination of red culture resources.

Furthermore, the government can establish a national red culture resource sharing platform to aggregate digital red culture resources from various regions, providing colleges with a unified resource repository. This national platform not only facilitates resource integration and efficient utilization but also promotes communication and collaboration among different colleges, advancing the spread of red culture.

3.4.2 Enterprise Technical Support and Product Development

Enterprises, particularly those specializing in educational technology, play a pivotal role in providing technical support and facilitating product development for the digital integration of red culture resources into college ideological and political courses. These enterprises can leverage their digital technology expertise to create red culture education products tailored to the specific teaching needs of colleges. For instance, they can develop VR courses centered around red culture themes, digital red culture museums, and online learning platforms that enhance students' learning experiences.

Additionally, enterprises can offer personalized technical support based on the actual requirements of colleges. For example, colleges located in revolutionary old areas may wish to utilize digital means to transform local red culture resources into teaching content. In such cases, enterprises can provide customized solutions to aid in the development and application of these digital resources.

Furthermore, enterprises can collaborate with colleges to develop big data-driven red culture teaching platforms that monitor students' learning behaviors and gather feedback in real-time. This feedback helps teachers optimize course design, fostering a more effective learning environment. This deep integration of technology and education not only propels innovation in red culture education but also creates new market opportunities for enterprises, thereby achieving mutual benefits.

3.4.3 Innovative Exploration and Academic Support from Colleges

Colleges are both practitioners and innovators in integrating red culture resources into ideological and political courses. First, colleges should leverage their dual functions of teaching and research to explore innovative integration paths for red culture resources into ideological and political education. Faculty members can conduct academic research to uncover the diverse values of red culture and design teaching content and methods tailored to different majors and disciplines. For instance, in sociology courses, they can explore the relationship between red culture and social change; in economics courses, analyze the impact of red culture on socio-economic development; and even integrate the scientific and innovative spirit of red culture into natural science courses.

Additionally, colleges should promote theoretical research and curriculum development on red culture, encouraging faculty to integrate red culture into textbook writing, course design, and teaching methods. This academic support can provide a solid theoretical foundation and innovative practices for the digital integration of red culture resources.

Furthermore, colleges should encourage interdisciplinary research, expanding red culture studies into more fields. For example, organizing experts and scholars from history, literature, sociology, and other disciplines to explore digital paths for red culture and its application in ideological and political education can advance the in-depth development and systematic application of red culture resources. Such interdisciplinary research enriches college teaching resources and enhances students' comprehensive understanding and multidimensional thinking abilities regarding red culture.

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