Design Technology of Distance Teaching Platform for Ideological and Political Education Based on Information Technology

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Abstract. Ion technology on people's work and life is increasing, and people's thinking and behavior have also changed greatly. In this context, the integration of information technology and ideological and political education has gradually become an inevitable development of education and teaching. But it also brings unprecedented challenges to ideological and political education in colleges. Focusing on the goal of encouraging ideological and political work with information technology, enhancing the sense of the times and attractiveness, actively exploring the use of information technology to promote the development of ideological and political work, research and innovation. Using modern information technology to support ideological and political education, this new carrier promotes The innovation of ideological and political methods is an important and urgent practical issue. In order to promote the development of political education, this article will use information technology to study the distance teaching platform of ideological and political education. The platform is designed using Web technology. Questionnaire surveys and interview methods An empirical study was conducted in combination. It went deep into schools and colleges, and worked with students and school ideological and political workers. A total of 980 questionnaires were collected. The experimental results show that the choice of ideological and political distance teaching platform can reach 84.3% of students. Therefore, through the research in this paper, a targeted distance learning management system is designed, which can provide reference and help for network distance learning.

Keywords: Information Technology, Web Technology, Ideological And Political Education, Distance Learning Platform

1. Introduction
With the continuous progress of China's science and technology, the impact of information technology on education and teaching has become increasingly important. General Secretary Xi Jinping has emphasized more than once that Chinese educators should use information technology to conduct ideological and political education in order to effectively stimulate students' enthusiasm and improve their overall quality in a subtle way. Help them establish a correct outlook on life, values and world outlook, and provide them with stronger support and guarantee for their comprehensive development [1,2]. Teachers should use advanced teaching equipment, innovate teaching models, optimize teaching structures, and enhance teaching effects. Relying on the background of Internet education, according to the requirements of deep integration, explore new methods that combine information technology and subject teaching in practice [3-5]. In the information environment, everyone will participate in the information interaction as the disseminator and receiver of the information. The convenient network platform not only gives college students more voice, but also brings challenges to ideological and political education in colleges and universities [6,7].

Colleges and universities are at the forefront of ideological work, shouldering important tasks of studying and studying Marxism, guidelines, and policies, and are important positions for the party's theoretical thinking and the construction of spiritual civilization in universities [8-11]. The traditional university education management model is mainly based on classroom teaching and traditional campus media promotion. Information interaction is the realization form of ideological and political education. The implementation of ideological and political education can be seen as the transmission of information [12]. Educators first use their initiative to process and package the original educational content into appropriate educational information, and then select the appropriate transmission channel to transmit the educational information to the educated. In this process, the educator is the producer and sender of the information, the educated is the receiver of the information, the educational content is the information, and the transmission path is equivalent to the communication channel [13,14]. Ideological and political work is an important task for schools. In the new era of informationization, the distance ideological and political education system has emerged at the historic moment, and has gradually become an important part of university informationization construction.

In fact, the integration of ideological and political education and information technology has achieved certain results. The distance learning platform is a combination of the main technologies and functions of modern distance education, a comprehensive platform that provides distance education services, and learners and resources. The investment and construction of modern technology and equipment, as well as the establishment of a fully-featured distance learning platform, are the basic guarantees for the quality of distance education. However, in order to fully reflect the various application advantages of information technology and improve the quality of ideological and political education on this basis, teachers must respect the student's status as the subject of study, and combine the students' learning needs and the development of ideological concepts. And political education. It is necessary to formulate relevant information technology integration guarantee measures to ensure that the comprehensive ability of students is fully improved. In this regard, this article uses information technology to study the ideological and political education remote platform, which lays a solid foundation for students to study ideological and political courses.

2. Method
2.1. Distance education concept

Online distance education teaching integrates advanced education technology and information technology, breaks the limitation of time and space, and re-integrates and optimizes valuable teaching resources. Distance education can also be called online education. Online distance education is an important way of adult education. It mainly uses Internet technology to establish corresponding online teaching platforms, which not only makes up for the shortcomings of traditional teaching methods, but also breaks through the status quo of traditional education. Students are no longer limited by time and place. They can browse the corresponding information at any time according to their learning situation, realize online interaction and communication, and lay a good foundation for future promotion and development. In a narrow sense, distance education is an educational organization that sorts out and optimizes various teaching resources, and will organize some important learning exchange activities to help learners learn. In carrying out specific activities, teachers have realized online learning for learners in different regions at the same time through the online platform. Learners use terminal devices or new media for learning, thereby improving the immediacy and effectiveness of teaching. In a broad sense, distance education is a form of unified teaching between learners, teachers and educational institutions using different forms of media. One course can achieve online learning for multiple learners. With the development of modern distance education, learners can use modern information technology to transfer high-quality curriculum resources outside the school. Thereby improving teaching efficiency, no longer relying on traditional face-to-face education, and realizing classified teaching of teachers and students. It further enriches the current teaching style and enhances the flexibility and diversity of teaching. As far as the learning organization model is concerned, the distance education organization model mainly includes a personalized learning model and a collective learning model. Teachers use the platform to achieve online communication and interaction with students.

2.2. Web technology

Web services are mainly described by the operation interface, which mainly includes the actual description of each link, including the description of the message format, the description of the transmission protocol, and the description of the location. Services can achieve cross-technology cooperation. Web service technology has changed the previous service methods, established a perfect structure, and can meet the needs of users at different levels. Web service is an interface accessed through the network using a standard XML message mechanism. This interface describes a set of accessible operations. Web services are described using standard, standardized XML concepts, called service descriptions for Web services. This description contains all the details necessary to interact with the service, including the message format (describes the operation in detail), the transport protocol, and the location. This interface hides the details of implementing services, making it independent of software and hardware application platforms and programming languages. This allows and supports Web services-based applications to become loosely coupled, component-oriented, and cross-platform implementations. Web services meet the requirements of a specific task or a set of tasks, and can be used alone or with other Web services to implement a complex set of functions or a business transaction. According to the operation status of Web services technology, it mainly plays the following three important roles. First, as a service provider, you can publish the content of the corresponding service at any time and respond to the corresponding service request. Second, service
registration agents, which belong to information intermediaries, can be combined with actual service providers to carry out scientific and reasonable classification, especially to improve service search services. Third, service requesters can make use of query and search services to improve service quality. Web services technology enables interaction between different functions, and publishers can register their own access interfaces. To use a service requester, you need to query and proxy specific services; the binding operation can mainly implement the services provided by the service provider.

3. Experiment

Investigate and analyze the problems in using information technology to support the development of ideological and political distance education in colleges and universities, and the problems found in the investigation. For example, the importance of information technology is not high, and the application of existing basic information technology is insufficient, resulting in insufficient application of information technology, low utilization rate, untimely development, and insufficient information literacy of the subject of thought. And political work, as well as construction of campus information technology. Slow pace, insufficient application of information technology in ideological and political work, aging hardware equipment, insufficient software development, insufficient utilization, etc. The causes of these problems were analyzed. With the support of university information technology, exploring the current status, problems, and causes of the innovative development of ideological and political work is the focus of this topic. This article has carefully crafted a questionnaire, and conducted a sample survey of teachers and students in universities, focusing on the questionnaire survey on the use of information technology by college students. Randomly selected 1,000 students of all grades from 15 universities, distributed questionnaires, recovered 980 questionnaires, and 967 valid questionnaires, with an effective rate of 98.6%. Statistical analysis was performed on the valid questionnaires recovered using the spss software. Have in-depth exchanges and interviews with ideological and political workers and student representatives in different departments of colleges and universities, listen to their opinions on the use of information technology to carry out ideological and political work, and put forward suggestions and suggestions for improvement. Information technology supports ideological and political work in universities. Personal interviews and exchanges with investigators involved in the content and questions of the dissertation to understand the true and specific relevant situation.

4. Discuss

As information technology has become an indispensable part of people's study, life and work in today's era, and with the continuous maturity and development of information technology, it increasingly meets and meets the needs of life, study and work. At the same time, college students are the main force in using information technology. Military personnel willing to accept new things also have higher education. In the course of the survey, we found that college students use information technology in their lives and studies very frequently, and have generated varying degrees of dependence. Therefore, in Figure 84.3% of students, distance education is selected for ideological education, far exceeding traditional method.
The daily campus life and study of college students has been shrouded in information technology, and has become more and more information. Even without leaving home, they can achieve basic life, social life and learning, and their dependence on information technology is increasing. According to different purposes, the number of “posting and obtaining various types of information” using information technology is also increasing, which shows that college students are willing and like to use information technology to express opinions, exchange opinions or ask for help. Table 1 shows the proportion of college students using mobile phones. Among them, there are many options, such as "online dating chat", "find learning materials", "get practical information about life", "watch movies, listen to music, read novels", each choice has a certain proportion.

| Learn to check information | Download software | Reading novels | Online job search | Other |
|----------------------------|-------------------|----------------|------------------|-------|
| 78.4%                      | 35.4%             | 68.4%          | 10.4%            | 6.7%  |

It can be fully explained from Table 1 that college students' study life and information exchange cannot be separated from the use of mobile phones and computers, but are relatively large for entertainment and entertainment. Students must make full use of network computers and smartphones to receive more information, including ideas. Various educational and teaching activities, including political education, are tasks that universities and educators must attach great importance to and do well.

The ideological and political distance education platform is mainly based on ideological and political theory. Ideological and political theory is mainly responsible for the release of key news and the construction of databases. School professional teachers and workers will investigate, collect and upload data. The information release system, as one of the main systems of the ideological and political theory system, consists of multiple modules. The function of each module interacts with the division of labor to establish a comprehensive and rigorous plan. The published content is mainly...
managed by articles, administrators, articles, subsystems and other modules. Figure 2 shows the structure of the ideological and political theory module.

![Figure 2. Ideological and political theory module structure diagram](image)

The virtual experiment module is the biggest difference between different platforms. It is mainly based on the specific goals and teaching directions of the distance learning platform. In the virtual experiment module, teachers refer to basic resources as auxiliary resources. Moving the traditional laboratory to the cloud can quickly complete the deployment of the experimental environment, and the unified management space is used by students, and there is no need to consider environmental differences in many practical operations. Virtual experiments rely on high-performance servers and can perform high simulation experiments. At the same time, efficient data processing functions can quickly integrate resources. Using a teaching method that combines infrastructure and experimental environment, hardware and software can be separated, and different virtual resource pools can be set up for different experimental course content. To apply the network to school management, students can use the network to learn about the school. You can also make suggestions and opinions on the school's teaching management and services, which is conducive to the school to accurately grasp the thinking power of students.

5. Conclusion

From the perspective of the information environment, ideological and political education in universities is facing opportunities and challenges. The high integration of information technology and ideological and political education cannot be achieved overnight. Teachers and relevant experts and scholars need to make targeted innovations based on the actual situation of the school and students. In the process of the integration of information technology and ideological and political education, we constantly summarize relevant experiences to optimize the modern distance education work. This article is an ideological and political distance education platform, which consists of system function analysis, system design, and various feedback systems. It uses system development methods and development technologies, such as Web services technology. It can meet the needs of different personnel in the army in all aspects and guarantee ideological and political work. The smooth progress also fully reflects the sense of the information age brought by computer technology and networks.

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