



**THE CONSTRUCTION OF IDEOLOGICAL AND POLITICAL
EDUCATION NETWORK RESOURCES IN CHINESE
UNIVERSITIES FROM THE PERSPECTIVE
OF PERSONALIZED LEARNING—A CASE STUDY OF
SHANDONG ENGINEERING VOCATIONAL UNIVERSITY**

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**AN INDEPENDENT STUDY SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE MASTER'S DEGREE OF BUSINESS
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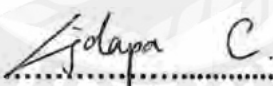
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Thematic Certificate

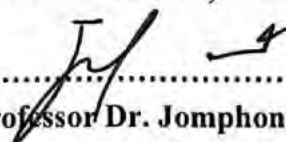
To

MA XIAOQING

This Independent Study has been Approved as a Partial Fulfillment of the Requirement
of International Master of Business Administration in Education Management

Advisor: 
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Title: The Construction of Ideological and Political Education Network Resources in Chinese Universities From The Perspective of Personalized Learning—A Case Study Of Shandong Engineering Vocational University

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Degree: Master of Business Administration

Major: Education Management

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ABSTRACT

This research aimed to study the construction of ideological and political education network resources in Chinese universities from the perspective of personalized learning, by taking Shandong Engineering Vocational and Technical University as an example. The objectives of this study were: 1) To build a more scientific and reasonable effective learning platform that can fully mobilize students' learning for Shandong Engineering Vocational College; 2) To build a multi-dimensional learning interactive evaluation and feedback system in school of ideological and political education for Shandong Engineering Vocational College.

Based on the theoretical research and practical achievements of international scholars, this study adopts the literature review research method of constructivist theory, multiple intelligence theory, personalized learning theory, and analysis the current situation of the construction of ideological and political education network resources in Shandong Engineering Vocational and Technical University. It is concluded that 1) Update students' learning concept, pay attention to the pattern of "big thinking and politics", change the single educational concept of ideological and political education, and promote students' independent construction of the network platform of ideological and political education in Shandong Engineering Vocational and Technical College; 2) Strengthen personalized learning interaction with the help of "big data" and based on students' main body." According to the viewpoint of constructivism, a multi-dimensional learning interaction evaluation and feedback system is constructed in the ideological and political education of the school to strengthen the carrier support.

Finally, the results of this study are reflected, discussed and suggested. For example, it can be built from multiple dimensions such as updating learning concept, promoting students' independent construction, improving learning resources, stimulating endogenous motivation of sharing, insisting on ideological and political

leadership, and promoting the network platform construction; based on students' main body, enhancing interactive feedback of learning, etc., and enhancing the effectiveness of nurturing people by strengthening carrier support. Finally, it promotes the continuous improvement of ideological and political education in colleges and universities, helps students' personality perfection and comprehensive development, so as to realize the goal of ideological and political education.

Keywords: ideological and political education, network resources, personalized learning

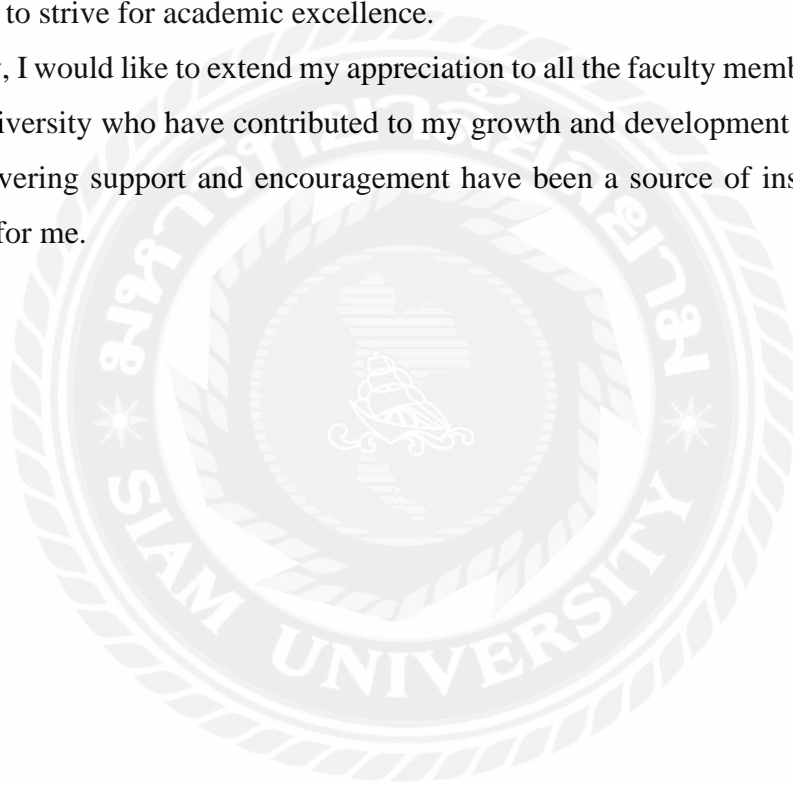


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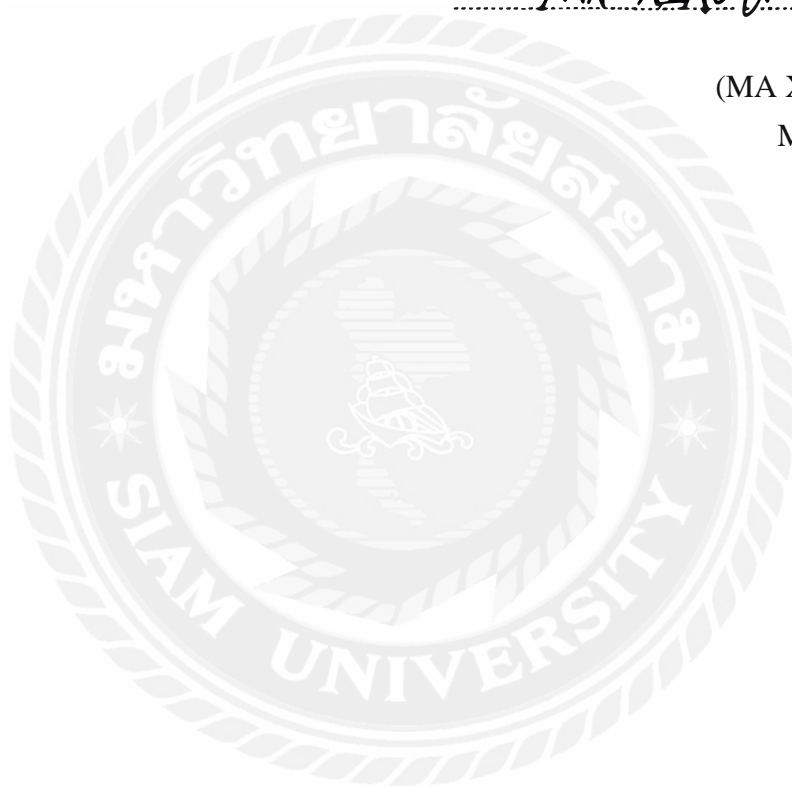
Declaration

I, MA XIAOQING, hereby certify that the work embodied in this independent study entitled "Performance evaluation study on the integration of industry-education by taking Shandong Engineering Vocational University as an example" is the result of original research and has not been submitted for a higher degree to any other university or institution.

MA XIAOQING

(MA XIAOQING)

May 29, 2023



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1. Introduction

1.1 Research Background

At present, under the background of rapid development of information technology, various kinds of network science and technology are born with it, and new media such as cell phones are iterating rapidly. The network spreads knowledge through pictures, audio, video, and other diversified forms, and a large amount of network information emerges in front of teachers and students in colleges and universities, which affects students' daily life and cognition, providing a new perspective and a new path for the construction of network resources for ideological and political education, which is the current ideological and political education to realize It is the key to realize personalized learning resources, open learning platform, and diversified learning methods. The use of network resources for the dissemination of cultural values is a realistic demand for ideological and political Education in colleges and universities in China, which helps to update, improve and enhance ideological and political Education. According to the Outline of the National Program for Medium-and Long-Term Education Reform and Development (2010-2020) issued by the CPC Central Committee and the State Council (Jian, 2022). Personalized learning has become a new trend in education.

Personalized learning has emerged as a new trend in education. The 'National Medium and Long-term Education Reform and Development Plan (2010-2020)' (hereinafter referred to as 'the Plan (2010-2020)') emphasizes the importance of a people-oriented approach and the establishment of diversified talent training. It promotes respecting individual choice and encouraging individual development (Gan, 2021). The Ministry of Education advocates for collaboration between the government and schools to create an educational environment that caters to 'individualized learning' and adequately addresses the unique needs of students' personal growth and development. Due to genetic factors and upbringing, no two learners in today's society are identical, and each person's learning experience is as distinctive as the lines on their palm. "Learning to Survive - Education Today and Tomorrow" proposes that education's internal development should be personalized. It suggests that in the future, teachers' task is to enhance learners' personalities and safeguard them in the real world, thereby cultivating their ability to thrive and improving their overall development quality (Jian, 2022).

In the new era of ideological and political education in universities and colleges, it is imperative to keep up with the times. This involves adopting new media and technologies to harness the potential of ideological and political education, integrating them deeply with science and technology, and enhancing their relevance and impact. The Internet's development offers various avenues for research and practical foundations to update and transform ideological education in schools. Teachers are changing their educational philosophies and leveraging the power of the "Internet+" to assist students in realizing personalized learning.

The Outline (2010-2020) emphasizes the need to continuously improve the educational concepts, objectives, means, content, and methods of moral education in colleges and universities, as well as to deeply study the inherent nature of ideological and political education (Gan, 2021). It sets forth new requirements for cooperation between ideological and political educators and colleges and universities, suggesting

that ideological and political education should be based on college students' ideological reality and their characteristics, such as their affinity for the Internet. It advocates for the integration of ideological and political education with network information resources. With the rapid change in college students' learning methods, particularly the emergence of personalized learning, innovating the learning mode of college students, improving the teaching methods of ideological and political education in colleges and universities, enhancing the development of network resources for ideological and political education in colleges and universities, and promoting higher education reform have become important topics in the field of ideological and political education and higher education (Albano, Miranda, & Pierri, 2015).

1.2 Research Problems

Intelligentizing teaching strategies is crucial given the growing importance of ideological and political education at prestigious colleges and universities. (An, 2022). Shandong Engineering Vocational University actively promotes the integration of the construction of Ideological and Political Education network resources, and the following two problems still exist:

1. The school's learning resources are not effectively developed, the learning platform lacks sufficient effectiveness, and learning interactions are not fully established.
2. There is no multi-dimensional evaluation feedback system, such as building interactive feedback on learning in school ideological and political education, and there is no strengthening of carrier support to enhance the effectiveness of education.

1.3 Objectives of the Study

1. To build a more scientific and reasonable effective learning platform that can fully mobilize students' learning for Shandong Engineering Vocational College.
2. To build a multi-dimensional learning interactive evaluation and feedback system in school of ideological and political education for Shandong Engineering Vocational College.

1.4 Scope of the Study

This study primarily utilizes the literature review method to analysis the current state of constructing ideological and political education network resources in Chinese universities. It examines the construction of such resources in both domestic and international educational institutions and conducts a systematic investigation of theories such as constructivism, multiple intelligence, and personalized learning models that support this study. Additionally, a multi-dimensional evaluation feedback system is constructed, including the development of network platform resources and learning interaction feedback.

Analyzing the current situation of ideological and political courses at Shandong Engineering Vocational and Technical University, this article reviews 255 articles, including 100 papers on curriculum ideological and political education, 30 papers on ideological and political construction, 30 papers on vocational colleges, 30 papers on teaching reform, 20 papers on curriculum ideological and political education, and 45

papers on constructing theory of ideas, completed from September 2021 to April 2023.

1.5 Research Significant

Currently, some issues need to be addressed in the construction of network resources for ideological and political education in Chinese colleges and universities. These include the need to improve software and hardware facilities and raise awareness of the importance of timely adaptation to the evolving internet landscape. However, there has been a significant amount of research, ideas, and practical experiences that are valuable for reference. Therefore, it is necessary to analyze and study the construction of network resources for ideological and political education in colleges and universities while preserving the original meaning (Bai, 2022).

1. This paper aims to study ideological and political education in Chinese colleges and universities from a fresh perspective, which contributes to a more comprehensive understanding of this field (Chen, 2014). Currently, research on the methodology and epistemology of college ideological and political education has achieved relative maturity. In this study, the concept of personalized learning is integrated with the utilization of information technology to deepen the methods and channels of ideological and political education. Taking Shandong Engineering Vocational and Technical University as a case study, personalized learning is incorporated into the teaching and management approaches to constructing ideological and political education network resources. This research endeavor aims to enhance the construction of network resources for ideological and political education in colleges and universities by improving personalized learning and establishing a more scientifically and rationally designed network platform. The ultimate goal is to achieve moral education in higher education institutions (Collins & Halverson, 2010).

2. At Shandong Engineering Vocational and Technical University, a multi-dimensional evaluation feedback system, including learning interaction feedback, is developed to assess the integration of industrial ideological and political education within the classroom. This system serves multiple purposes. Firstly, it provides a scientific and effective evaluation method to objectively assess the construction of the higher vocational curriculum's ideological, and political education platform. This involves establishing a suitable evaluation model, formulating more effective evaluation standards, drawing on reasonable evaluation methods, and enhancing the standardization and scientific nature of evaluation research (Shi, 2019). Secondly, from the perspective of personalized learning and leveraging the advantages of educational network resource construction, the system incorporates multi-dimensional evaluation feedback, such as learning interaction feedback. This approach facilitates the improvement of management practices in ideological, and political education and optimizes its effectiveness in colleges and universities. In summary, the multi-dimensional evaluation feedback system implemented at Shandong Engineering Vocational and Technical University enables an in-depth assessment of the integration of industrial ideological and political education in the classroom. It enhances the objectivity and effectiveness of evaluating the platform construction of higher vocational curriculum ideological and political education while promoting the optimization of management practices and the effectiveness of ideological and political

education in colleges and universities.

The ideas and methods proposed in this paper regarding the construction of online platform resources for curriculum ideological and political education in colleges and universities, as well as the evaluation mechanism involving interactive feedback on students' learning, can also serve as a valuable reference for similar higher vocational institutions. By implementing these ideas, higher vocational education can be better promoted and undergo innovative development (Chen, 2020).

2. Literatures Review

In this chapter, the main focus is on conducting a literature review and analysis to examine the current status of constructing network platform resources and the evaluation system with multi-dimensional feedback, including interactive feedback on students' learning, in the field of college and university ideological and political education. Additionally, this study delves deeply into the constructivism theory, multiple intelligence theory, and personalized learning theory that provide support for this research (Chuang, 2010). The construction of high-quality network resources and teaching platforms is essential for promoting the reform and innovation of ideological and political education in colleges and universities, as well as the transformation of classrooms in the information age. This endeavor is beneficial for enhancing the comprehensive understanding of ideological and political education in Chinese higher education institutions. Furthermore, it contributes to the reform of the teaching methods in ideological and political education and facilitates the better realization of students' personalized learning (Du, 2022).

2.1 ideological and political education

At the core of higher education is the task of nurturing individuals. Through the learning process, students can achieve comprehensive development and refine their minds and bodies. The mission of the ideological and political science course is to provide students with a deep understanding of Marxist theory. The aim is to educate individuals on Marxist principles, guide them in developing accurate concepts, enhance their ideological and political qualities, enable them to distinguish between right and wrong, and equip them with problem-solving abilities (Huang, 2018). Since the initiation of the reform and opening-up policy, theoretical research and practical exploration of ideological and political education in colleges and universities have been key topics of academic interest. It is crucial to integrate ideological and political education in colleges and universities with the actual needs of students, establishing a coordinated and cooperative working pattern (Zhou, 2022). Through the study of ideological and political science, students can clarify the kind of individuals they aspire to become. Personalized learning facilitates the improvement of students' diverse levels and qualities, promoting their all-round development. Moreover, there exists an implicit nature in the way of learning ideological and political studies. Through personalized learning, students can achieve personal growth, spiritual sensitivity, and spiritual transformation. The collaborative relationship between teachers and students fosters a deep understanding of the connotations of ideological and political studies. This approach represents a distinct form of ideological and political education in colleges

and universities, integrating knowledge and ideology into a unified whole. With the assistance of network resource construction, students engage closely with real-life experiences and engage in personalized ideological and political learning. This process fosters a transformation in students' ideological consciousness as they acquire ideological and political knowledge (Fu, 2020).

According to data research, the current focus of college ideological and political education is on cultivating individuals' moral character. It primarily involves discussing elements such as the curriculum for ideological and political education and the concept of "comprehensive ideological and political education." The author adopts a perspective highly relevant to the thesis topic and argues that the essence of college ideological and political education lies in the incorporation of ideological and political education into students' daily studies. This entails integrating ideological and political education into various aspects of education, such as the curriculum and specific courses. In colleges and universities, ideological and political education refers to the process of educators, guided by certain ideological concepts, political views, and moral principles, imparting knowledge about ideals, beliefs, moral values, patriotism, and other aspects to students. This education aims to nurture individuals who can meet the requirements of social development in the modern era (Gu, 2017).

2.2 network resources

According to the information and research available, the network resources for college ideological and political education primarily encompass various aspects. These include online learning materials for college ideological and political education, resources available on online learning platforms dedicated to college ideological and political education, online learning tools specifically designed for college ideological and political education, and the human resources involved in online learning for college ideological and political education. In the context of your paper, it would be appropriate to focus on the following aspects that are more relevant to your topic:

First, online learning resources for college ideological and political education can be categorized into broad and narrow senses. In a broad sense, these resources encompass all digital materials related to college ideological and political education disseminated through the Internet. This includes resources for students, teachers, and general online learning materials (Zhang, 2011). In a narrow sense, the online learning resources for higher education ideological and political education specifically refer to teaching content that utilizes modern information technologies such as multimedia, databases, and networks (Long, 2021). These resources are developed through network technology and are specifically tailored for college ideological and political education, primarily including media materials and network-based courses. Online learning resources for ideological and political education in colleges and universities exist in two forms: hardware environment resources and network information resources. The former refers to the physical equipment available in the networked space that can be used for ideological and political education, such as computers, communication equipment, and network hardware. The latter refers to the various knowledge, information, and materials embedded in the network that can be accessed for ideological and political education (Xie, 2014). The ideological and political theory courses in colleges and

universities serve as the main channel and platform for cultivating students' scientific worldviews, outlooks on life, and values. They also represent a significant aspect of the content included in online learning resources for college ideological and political education.

Second, the network learning platform for ideological and political education in universities refers to the use of network technology by ideological and political education practitioners in universities. It utilizes various information-receiving and processing tools as carriers and combines the cognitive and behavioral development characteristics of contemporary college students. Following certain standards, it selects, produces, and applies ideological and political education information in a networked format. The purpose is to ensure that network information has a positive impact on college students, enabling them to develop ideological and moral qualities and information literacy that align with societal needs (Du, 2020). With the advent of the data era, the development of network learning platforms for ideological and political education in universities has become more comprehensive and profound. Currently, there is a greater diversity of types and increasingly rich functionalities in these platforms, including "three micro ends," MOOCS, micro-courses, flipped classrooms, learning platforms, and more (Fan, 2019). These online learning platforms for ideological and political education in universities effectively compensate for the shortcomings of traditional ideological and political education by simulating the entire teaching process. Students can leverage the multimedia attributes of the platform to engage in personalized learning, incorporating different forms of learning content presentation such as graphics, text, animations, audio, and video. They are assisted in achieving expected learning outcomes through data interchange, audio transmission, picture transmission, and video delivery (Wang, 2015).

Lastly, the interactive resources for online learning in ideological and political education at universities refer to the networked interactive forms supported by network technology and various information-receiving and processing tools. Ideological and political educators in universities, considering the cognitive and behavioral development characteristics of students, transmit, communicate, and provide feedback on ideological and political education information following certain standards. The purpose is to ensure that network information has a positive influence on college students, enabling them to develop ideological and moral qualities and information literacy that align with societal needs (Li, 2011). According to some research and surveys, the interactive resources for online learning mainly cover different elements such as learning interaction, course integration, and human resources. The author has selected elements highly relevant to the thesis topic and categorized them as follows. Firstly, based on learning resources and platforms, it promotes various online interactive activities in ideological and political education that foster the comprehensive development and individual improvement of college students. It serves as a network resource for facilitating personalized learning in ideological and political education. There are two forms of expression: offline classroom activities utilizing network resources and online activities for networked learning (Wang, 2022). Secondly, teaching human resources encompass ideological and political educators in universities, including faculty members, counselors, teaching administrators, and experts linked

through network resources (Wei, 2020). Thirdly, on this basis, ideological and political education is not limited to theory and practice courses but also integrated into the teaching of other subjects, known as curriculum integration. By adopting a broader perspective on ideological and political education, it combines curriculum integration with ideological and political education courses, infuses ideological and political education elements into the teaching management of other courses, reflects ideological and political education in the process of university teaching management, and adheres to the fundamental principle of student-centeredness in curriculum integration (Xie, 2014).

2.3 Personalized Learning

The concept of personalized learning currently lacks a unified definition in academia. Some researchers define personalized learning as placing students at the center of their learning, utilizing autonomous, exploratory, reflective, and innovative learning approaches tailored to their individual characteristics and development potential, enabling each learner to achieve a learning experience that is suitable for their own full, accessible, and harmonious development (Gu, 2017). Based on relevant literature and research on the topic, customized learning mainly involves aspects such as student autonomy, holistic development, and teacher guidance. Considering the high relevance to the theme of this study, the author provides the following definition for personalized learning: customized learning refers to an approach that prioritizes the learner, utilizing differentiated resources, open platforms, and diverse interactions. It employs autonomous, guided, and diversified learning methods tailored to the individual characteristics and development potential of students, enabling each learner to achieve comprehensive personal development (Huang, 2018).

Personalized learning utilizes the advantages of resources to form a complete educational ecosystem, contributing to the development of a comprehensive educational framework. By collecting learning data through the internet, personalized learning better meets the learning needs of students, enabling interactive communication and facilitating personalized learning for students to achieve holistic development (Gao, 2022). Personalized learning can cultivate creativity in college students, guiding them to enhance their individuality and surpass themselves, thereby promoting their full, free, and harmonious development. Based on this foundation, the concept of personalized learning is grounded in enriching individuals' personalities, where learners refine their unique traits, interests, qualities, and characteristics through the learning process. Psychological research indicates that non-intellectual factors such as personality traits and internal motivation play a critical role in guiding individuals toward self-improvement. As learners' emotions, willpower, motivations, interests, and personalities vary, learning affects individuals differently. Personalized learning is established within the broader context of teacher-student educational interactions, constructing a relatively stable structure of network resources and relevant operational procedures. It respects students' differences and diverse learning needs, providing them with adequate learning support to achieve comprehensive development (Wang, 2015).

Table 2.2 Selected Perspectives on personalized learning in China

Time	People	Perspectives
Ancient times	Confucius	Targeted and tailored to the individual
	Yuan Cai	Sex should not be forced together
	Zhu Xi	Confucius taught people according to their talents
Modern times	Liu Quanli etc.	The importance of "teaching to the individual" and personalized teaching is emphasized

2.4 The constructivist theory

The constructivist theory suggests that individuals can only acquire knowledge by constructing their understanding of the world based on their existing frameworks of basic knowledge and experiences. This theory advocates for students to actively construct their learning by engaging with the external world, interacting, and communicating, thereby autonomously generating meaning. Students construct their understanding of knowledge in unique ways based on their backgrounds, and they determine the extent to which they grasp knowledge. During the learning process, students reach consensus through communication and interaction, ultimately forming meaningful constructions. Due to their diverse personalities, students approach learning and understanding knowledge with individual differences. The goal of personalized learning is not to eliminate these differences but to enhance and develop different personalities, thereby achieving comprehensive development (Jiang, 2022).

Constructivist learning theory provides a path of thinking based on student subjects in the selection and utilization of catholic education network resources, classroom construction, and catholic education network interaction.

2.5 Multiple Intelligence Theory

According to Gardner, intelligence is "the ability to solve practical problems and produce or create products that are valued in a particular cultural context." Online resources provide learners with practical knowledge, enabling them to engage in generative learning, develop their understanding, and deepen the internalization of ideological and political education content (Ghali & Cristea, 2009). The knowledge provided through online resources contributes to the enhancement of students' knowledge. Additionally, students can leverage online platforms to fully showcase their diverse learning characteristics, allowing different types of intelligence to be developed and optimizing the learning process, thus enabling students to achieve comprehensive development (Henze, 2005). This theory recognizes that intelligence is diverse, leading students to exhibit different personalities, and education should respect students' unique individuality. Students have different learning trajectories, interests, and development speeds. They have varying strengths in knowledge domains, innovative abilities, and cultural backgrounds. Therefore, it advocates for students to learn in their areas of expertise, thus realizing their socialization. As educators in higher education institutions, it is important to fully respect students' diverse intelligence and provide conditions for their intellectual development (Sun & Zheng, 2022).

Based on this, there is a fundamental theoretical basis for selecting content and personalized construction of ideological and political education network resources.

2.6 Personalized learning theory

Firstly, 2500 years ago, Confucius proposed the method of "teaching students following their aptitude," which was the embryonic stage of personalized learning. In modern times, the theory of personalized learning emerged only in the early 20th century. Personalized learning emphasizes the learners' potential and believes that learning needs to be tailored to their traits (Wu, 2015). The theory of personalized

learning can be understood as follows: based on different personalities, learners have different learning needs. Respecting learners' potential means respecting individual differences and emphasizing the provision of learning resources, methods, and means that meet their personalized needs. It also aims to unleash students' talents in diverse ways and achieve their comprehensive development (Wang, 2012).

Personalized learning is reflected in various aspects such as learning objectives, cognitive abilities, knowledge levels, and learning styles (Wang, 2012). In actual teaching activities, personalized learning provides learners with various educational resources that are adapted to their differences, allowing them to unleash their talents. Personalized learning can facilitate the establishment of connections between learners' existing knowledge and future learning, helping them discover their strengths. Additionally, student differences serve as an indispensable resource that fosters a complementary learning atmosphere, enabling diversified development (Wu, 2015). From the perspective of personalized learning, the construction of online resources for ideological and political education in higher education institutions aims to follow the guidance of personalized learning theory and adhere to the laws of educational development. It fully utilizes online resources for ideological and political education in higher education institutions to explore students' individualities to the greatest extent and facilitate the free development of their talents, ultimately achieving comprehensive development. The essence of constructing personalized learning resources lies in providing personalized learning resources, including learning content resources, human resources, information technology resources, and interactive learning resources, that align with students' differentiated learning environments and psychological characteristics (Zheng, 2014). The focus of personalized learning resource construction is to match the learning resources, including the learning objects, learning channels, learning forms, and learning support tools, with the differentiated needs of students, thereby enhancing the convenience of intelligent educational resources (Ding, 2016).

Second, due to the dual-subject nature of education, personalized learning theory embodies the concept of personalized education. Its connotations include creating a respectful atmosphere, providing guidance and support from teachers, and pursuing students' comprehensive development and individual growth orientation (Gu, 2017). Based on the concept of personalized education, the construction of personalized learning resources must focus on the different situational states of students, their conscious growth needs, and personalized learning characteristics. By combining the characteristics of educational resources themselves, the construction process involves selecting, filtering, and recommending learning resources for learners, ultimately achieving learning resource construction based on learners' characteristics (Qian, 2020).

Third, the connotation of personalized learning theory encompasses the theory of autonomous learning. Autonomy is the premise of human activity, and human autonomy is based on the individual's existence. Respecting the individual, each person has subjective agency. It is only under the premise of autonomous learning that personalized learning can be achieved. The manifestation of students' individuality aligns with the current emphasis on respecting human subjectivity. Respecting human subjectivity is reflected in respecting human rights, advocating equality, and recognizing that each person is a valuable and unique entity that should not be subject to the will of others (Li,

2020). Based on this foundation, personalized learning typically emphasizes the student's initiative and self-guidance in learning. Students control learning resources, actively choose activities, and integrate and summarize their learning experiences after class (Gu, 2017). In terms of the process of autonomous learning, starting from students' learning interests and individual differences, their potential is stimulated, enabling comprehensive development (Hu, 2022).

In summary, personalized learning theory provides a theoretical foundation for various aspects of higher education, including personalized education concepts, the construction of personalized platforms for ideological and political education network resources, personalized teaching by teachers, and the autonomous and conscious learning of university students.

2.7 Shandong Engineering Vocational University

Shandong Engineering Vocational University is an undergraduate level vocational and technical university approved by the Ministry of Education and independently issued with diploma qualifications (Kuan, 2021). It is one of the first 15 undergraduate level vocational education pilot universities in China. School is located in a historical and cultural city and the national civilized city, said the capital of Jinan, has the main campus (chapter grave), north campus (he) two campus, nearly 23000 students, building area of nearly 700000 square meters, with intelligent manufacturing institute, institute of artificial intelligence, architectural engineering college, transportation, digital financial institute, business school, modern art school, marxism, institute of medical technology, institute of application technology and basic department. The library has a rich collection of books, including 1,021,500 paper books and 1.943 million electronic books.

In the course of more than 30 years of development, the university has always adhered to the party's education policy, implemented the fundamental task of moral education, taken the education quality as the core, service development and employment, the university and enterprise cooperation, and has developed a path of "highlighting engineering characteristics and focusing on connotation construction" (Gong, 2013).

Party building leads to high-quality development. School always adhere to the party leading, reform and innovation party building ideological and political work, build the ideological education course teaching, daily education and management, campus culture construction, social practice, network education "five one" the ideological and political education system, the ideological and political work throughout the education teaching process, formed the "full education, the whole process of education, comprehensive education" pattern, in the cultivation of socialist core values, help students choose the mainstream culture, advocating mainstream value, cultivate university spirit, etc., has played a huge education guiding role (Feng, 2012). It jointly built the "Ideological and political Education Practice Base" with Zhangqiu Sanjianxi, and was approved as three advanced grass-roots Party organizations in colleges and universities in Shandong Province. The Ideological and political Party Branch of Ma Institute was approved as the third batch of "National Party Construction Model Branch" of the Ministry of Education, achieving a major breakthrough in the national projects of the school (Gu, 2017).

Adhere to the engineering school, the connotation and quality of continuous improvement. According to the demand for talents in pillar industries, strategic emerging industries and modern service industries in Shandong Province and Jinan City, the university has adjusted and optimized the professional structure in time, and realized the close connection between the professional chain and the regional economic industrial chain (Henze, 2005). At present, the undergraduate professional 26, specialized professional 49, covering equipment manufacturing, electronics and information categories, transportation, civil construction, resources, environment and security, finance, culture, art, tourism, medicine and health categories such as nine professional categories, engineering professional accounted for more than 70%, formed a new infrastructure information technology, intelligent manufacturing technology application, new energy automobile technology, new building industrialization four advantage professional group (Dong & Zhao, 2021). It has built 2 provincial brand professional groups (construction professional group, intelligent manufacturing technology application professional group), 1 provincial high-level professional group (new infrastructure information technology professional group), 4 provincial characteristic majors (numerical control technology, electromechanical integration technology, electronic information engineering technology, construction engineering technology), Two engineering projects jointly built by provincial enterprises and schools (electromechanical integration technology (3D printing technology application direction), intelligent manufacturing-robot application technology), More than 20 provincial quality courses, resource sharing courses, course ideological and political demonstration courses, More than 10 municipal industry-education integration demonstration majors (groups), strategic development project of integration, modern apprenticeship pilot cultivation projects, vocational experience pilot cultivation projects and so on, Won 14 vocational education and teaching achievement awards in Shandong Province, Among them, there are 3 provincial special prizes, 5 first prizes, 5 second prizes and 1 third prize. In 2022, all the 8 declared educational reform projects were approved at the provincial level, including 6 key projects and 2 general projects, and the number of key projects ranked first among vocational colleges in the province. In 2022, the university was approved as a bachelor's degree awarding unit and 15 awarding majors, covering three disciplines of engineering, management and art (Wu, 2015).

Adhere to the strategy of strengthening the school, to build a high-level teacher team. The school follows the law of vocational education, and aims to build a high-level "double-qualified" teachers, and has established a team of teachers with noble ethics, excellent professional skills and reasonable structure (Shen,1994). Existing full-time teachers more than 1300 people, including 763 master degree or above full-time teachers, with senior professional technical position of 540 people, with senior professional technical position full-time teachers of 165 people, with more than three years working experience, or nearly five years not less than 6 months to the enterprise or production service line practice experience of "double" teachers 699 people. Through professional construction, we have built 1 provincial Huang Danian teaching team (intelligent engineering technology), 5 provincial teaching innovation teams (intelligent manufacturing engineering technology, new energy vehicle engineering technology, e-commerce, big data engineering technology, construction engineering), and 5 provincial

teaching teams (numerical control technology major, electronic information engineering technology major, construction brand major, mechanical manufacturing and automation major, software technology major). Have enjoy special allowance of the State Council experts 3 people, the national business services technology experts 1 person, Shandong teaching teacher 6, chief technician in Shandong province, provincial youth skills teacher 3 people, quancheng chief technician 2 people, Shandong province has outstanding contribution 1 middle-aged experts, provincial youth excellent engineer, Jinan professional technical talents, 1 provincial teacher studio, senior engineer, senior accountants, senior technicians and other high-level technical skills talents.

We will deepen the integration of industry and education to build a new ecology for training high-level skilled personnel (Ma, 2017). Schools adhere to the "ability for this, to use" the educational philosophy, invested huge sums of money to strengthen the construction of practice teaching base, teaching and scientific research equipment value of 244 million yuan, has a public laboratory and professional laboratory 131, mechanical engineering, traffic engineering, civil engineering 3 big training center, teaching, scientific research, training for eight scientific research base. The enterprise real project into education teaching, pay attention to teaching depth fusion, colleges collaborative education, successively with more than 300 enterprises and institutions to establish campus practice base, successively with the century, Huawei, ding, baidu, tencent, China high-tech, jingdong, longji group, Shandong high-speed domestic well-known enterprises to build a batch of characteristic industry institute, cultivating talents of emerging industries (Hai, 2014).

Facing the major project of the transformation of old and new growth drivers in Shandong Province and the "Top ten Modern Advantage industrial clusters", the university actively carries out applied research and technology promotion and transformation centering on the development strategy of the country and Shandong Province, and the technical problems of industrial enterprises (Song, 2021). Has built ministry of key areas (digital equipment, big data) industry talent base, Shandong institutions of mechanical and electrical integration engineering technology research and development center, Shandong institutions transformation of scientific and technological achievements and technology transfer base, old and new kinetic energy conversion in Shandong province industrial Internet industrialization public training base, Shandong big data innovation talent base, prefabricated steel structure building intelligent manufacturing engineering research center in Shandong province, and other provincial platform, The university has set up four application research institutes, including new generation information technology, construction engineering technology, intelligent manufacturing technology and Belt and Road Cultural Industry Research Center, Accumulated for the enterprise science and technology research and development and achievement transformation of more than 60 products (Zhao & Gao, 2022). In 2022, it was approved as four provincial new technology research and development centers, including intelligent manufacturing in Shandong Province, smart city "space-time Things cloud application", new building industrialization, and new energy vehicle manufacturing and service, to enable the innovation and development of the industry.

Pay attention to scientific research and technology research and development, and achieved a series of achievements (Deng & Wang, 2020). In the past five years, the university has presided over more than 300 vertical research projects at all levels, including more than 50 research projects at provincial and ministerial level and above, and 89 technology development, consulting services and training projects entrusted by industrial enterprises, with an accounting fund of more than 50 million yuan. More than 800 academic papers have been published in Chinese and foreign academic journals, among which more than 60 have been retrieved in SCI and EI journals. He has edited and participated in the compilation of more than 200 academic works and textbooks, obtained more than 130 patents including national invention patents, more than 110 software Copyrights, participated in the compilation of 2 industry standards, and won more than 200 scientific research achievements awards at various levels.

The school takes promoting promotion as the orientation, pays attention to the cultivation of students' employment and entrepreneurship ability, and has established an employment system of "all staff participate in employment, guide the whole process, and make every effort to achieve employment" (Wang, 2016). Second, the innovation and entrepreneurship education through employment and guidance course, innovation and entrepreneurship plan competition; the third, the business incubation center and maker space for students; the fourth, the 1 + X "multiple certificate" acquisition system, students can obtain graduation certificate + multiple vocational qualification certificates (Cheng & Gong, 2020); and the fifth, the "little talent" campus recruitment management system, which provides good service for students' employment. The school won the first title of "Innovation and Entrepreneurship College of Shandong China Vocational Education Association".

We will promote the spirit of craftsmanship and make outstanding achievements in educating people. In the past five years, students have won more than 700 awards in various competitions at or above the provincial level, including 11 national first prizes, 31 second prizes, 63 third prizes, 62 provincial special prizes, 83 first prizes and 161 second prizes. The students' works won the first prize in the "Challenge Cup Rainbow Life" National Vocational School Innovation and Entrepreneurship Competition. The feature film "Young Craftsman", which was shot by students majoring 3D printing, appeared on the screen of China Education Television. "Charming China" reports on the experience of school integration of production and education.

The development of the university has been fully affirmed by the higher party committee and government and all sectors of society, and has a good social reputation. He has won the honorary titles of "National Top Hundred Vocational Schools", "National Innovation and Entrepreneurship Achievement Incubation Award" and "National First Pilot Unit of Digital Campus Construction"; President Professor Wu Mengjun won the National "March 8", 4th "Huang Yanpei Outstanding Principal Award", "National Advanced Individual in Vocational Education" by Ministry of Education, and 1st "Most Beautiful CPPCC Person" in Shandong Province. The school's educational deeds, educational achievements, and vocational undergraduate exploration experience have been reported by China Education Television, China Education Daily, Dazhong Daily, United Daily, Shandong Education Daily and other mainstream media (Wu, 2009).

Stand on a new starting point, run toward a new goal. As one of the first pilot universities of vocational education at the undergraduate level in China, the university adheres to high-starting point planning, high-level construction and high-quality development, and has established the development goal of building a high-level vocational and technical university. Under the guidance of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, the school will deeply study, publicize and implement the twenty spirit of the Party, reform, pioneering and innovative, and strive for the realization of new development goals with full enthusiasm, high morale and tenacious fighting spirit. Han, 2019)

3. Research Methodology

The research method used in this paper is the documentation method. A literature review is an important research method that involves the collection, analysis, and study of various existing relevant literature to select information for a specific investigation and research. In this study, the researcher conducted a literature review by searching knowledge databases, master's theses, journal articles, official educational websites, and other literature resources.

During the literature review process, the researcher collected a significant amount of literature as references and ultimately selected 38 articles closely related to this research as references. Through the review and theoretical summary of literature in the field of higher education, the researcher gained a comprehensive understanding of the relevant information, providing a theoretical basis for the entire paper.

After collecting the literature, the researcher conducted an in-depth and meticulous study of the collected literature and then organized it comprehensively. Through the literature study, the researcher clarified the core issues of this research and analyzed and summarized the problems that needed to be addressed.

In this study, the researcher employed three theories and extracted relevant indicators for the integration of industrial education from the related literature. The researcher also referred to the existing multidimensional evaluation indicator system for ideological and political construction in higher vocational education and student interaction, preliminarily constructing a multidimensional evaluation and feedback system for the industry network platform resources and learning interaction feedback of Shandong Engineering Vocational and Technical College.

By applying the literature review method, this article integrated various relevant literature resources, accurately grasped the current status and issues in the research field, and provided a solid theoretical foundation for the research. At the same time, through the comprehensive analysis and organization of the literature, the researcher can explore the problem from multiple perspectives, providing comprehensive theoretical support for the research. The advantage of this method is that it allows for the extensive collection and utilization of existing knowledge and research outcomes, providing ample background and literature support for the research.

In conclusion, the literature review method used in this article provided the researcher with a wide range of literature resources. Through comprehensive analysis and organization, the current status and issues in the research field were accurately understood.

4. Finding and Conclusion

Through the literature study, this article combines the collected literature with the existing network platforms for ideological and political construction in higher vocational education and the multidimensional evaluation indicator system for student interaction. It conducts a preliminary screening of the problems in the construction of network resources for ideological and political education in higher education courses. corresponding conclusions are drawn:

1. To build a more scientific and reasonable effective learning platform that can fully mobilize students' learning for Shandong Engineering Vocational College.

In order to establish a more scientific and reasonable network platform resources. First of all, the construction of Ideological and Political Education platform should be based on the perspective of personalized learning, the same page for optimization design unification, pre and mid-term use satisfaction research, closely around the law of students' physical and mental growth, based on the inner law of education, comprehensive coverage of the field of Ideological and Political Education, inside and outside the campus, inside and outside the classroom, online and offline, to promote the realization of comprehensive and healthy growth and meet diversified needs. Optimize the main interface and other sub-interfaces to facilitate operation and increase students' goodwill and recognition of using the Ideological and Political Education online platform for personalized learning. Secondly, the amount of information on the platform web pages is constantly updated and increased, and the platform editorial workers adjust the page layout to achieve layout beautification and content improvement, thus facilitating the use of learners and increasing their interest in learning. Enriching the content while matching the demands of students browsing the webpage improves the quality of personalized information platform construction and allows students to develop the habit of viewing Ideological and Political Education information. Finally, making full use of the resources of platforms such as Wisdom Tree and Scholastic Online provides rich course learning resources for personalized learning. Carry out flipped classroom, encourage the use of microfilm and other forms of education, expand online classroom, online scoring and other ways of thinking and politics education, enhance the diversified development of platform construction, and enhance learning interaction; analyze the thinking and politics education network environment, create an online platform, highlight the charm of traditional culture, and realize the mutual promotion of cultural education and thinking and politics education.

2. To build a multi-dimensional learning interactive evaluation and feedback system in school of ideological and political education for Shandong Engineering Vocational College.

It is necessary to use the construction of ideological and political education network resources in colleges and universities, with the help of "Big data", based on the main body of students, and enhance personalized learning interaction. According to the perspective of constructivism. To construct a multi-dimensional learning interaction evaluation and feedback system in school of ideological and political education, and strengthen carrier support. Firstly, respond to students' demands and guide them to learn independently. Carry out online interaction, set up personalized learning activities according to personalized learning needs, and achieve personalized learning goals.

Secondly, establish a reasonable learning interaction mode to promote the process management of network resource learning in ideological and political education in universities. Utilize software technologies such as instant messaging tools such as QQ, WeChat, MSN, etc, RSS subscriptions, blog posts, Social Bookmark social bookmarks, Tag tags, Wikipedia, graphite documents, and Tencent conferences. Emphasizing the use of ideological and political education network resources for personalized learning and interactive experience, according to some research materials, the construction of ideological and political network learning interaction is mainly based on online, by combine the advantages of online and offline education. Utilizing the construction of ideological and political education network resources in universities to achieve personalized learning and conducive to the comprehensive development of students, promoting the high-quality development of ideological and political education network resources in universities, and improving the quality of ideological and political education.

Ideological and political education in universities is the main channel for moral construction and talent cultivation (Xi, 2016). Universities should utilize the advantages of the Internet to optimize and enrich ideological and political education resources, explore the feasibility of personalized learning in ideological and political education, use network resources to improve the level of personalized learning, promote the development of ideological and political education in the new era, and achieve the goals of ideological and political education.

5. Recommendation

First, it is important to adhere to ideological and political guidance and promote the construction of online platforms. Autonomous development of efficient personalized learning resources that integrate moral education promotion, resource sharing, discussions, and interactions. Integrating learning support, information exchange, educational planning, activity arrangements, and practice demonstrations to comprehensively upgrade the teaching and management of ideological and political education, ensuring normal offline communication and interaction between teachers and students, and strengthening the interpersonal interaction system based on traditional models of ideological and political education. The construction of ideological and political network resources should make use of optimization and improvement of the online interface to enhance satisfaction and interest in learning experiences and promote the improvement of the teaching and curriculum framework of ideological and political education. Emphasis should be placed on the individual psychological experiences of university students, tailor learning plans, strive for excellence in improving the quality of learning resources, and focus on experiential feedback. Adhere to correct political guidance to ensure that the network resources for ideological and political education in universities have a clear political direction and strict standards. For shared resources such as text, photos, graphics, and PPT, standardized technical indicators should be established, entry thresholds for resources should be set, and the level of standardization in construction should be improved by refining the mechanisms and norms.

Adhering to the guiding role of ideological and political education is crucial for improving the utilization of network resources and promoting the development of

higher education. Massive open online courses (MOOCs), micro-lessons, flipped classrooms, and other approaches provide new ideas for the construction of personalized learning platforms for ideological and political education (Zhou, 2022). In the era of rapid development of online courses and the normalization of resource sharing, it is essential to draw on the concepts and models of digitalization and personalization in platform operations. Fully leveraging the advantages of ideological and political course network resources, new knowledge points, hot topic analysis, and real-life examples should be effectively integrated into educational curricula. Fragmented knowledge related to the curriculum should be presented systematically, forming a coordinated, collaborative, and cooperative network construction framework for ideological and political education.

Second, it is important to focus on the student as the main subject and enhance interactive feedback in learning. On one hand, the lack of process management tools and standardized assessment scales for ideological and political learning based on "commonly used scores" makes it difficult for students to receive personalized feedback and guidance from teachers. Teachers often have heavy workloads and are limited by physical space, further hindering one-on-one interaction with students. On the other hand, with a large number of students, the impressions obtained through subjective ratings may not be objective enough, and there may be unequal access to teaching resources. Therefore, it is necessary to utilize the construction of ideological and political education network resources in universities, leveraging "big data" and focusing on the student as the main subject, to enhance personalized learning interaction. This can be achieved by creating mechanisms for interaction between schools and society, establishing a reasonable learning interaction model, and promoting the process-oriented management of learning through ideological and political education network resources in universities. Utilizing instant messaging tools (such as QQ, WeChat, MSN, etc.), RSS subscriptions, blogs, social bookmarking, tags, wikis, Shimo documents, Tencent Meetings, and other software and technical means can help facilitate personalized learning interaction.

Updating learning concepts to promote students' autonomous construction. Focusing on the "broad ideological and political education" framework, it is necessary to change the single form of ideological and political education and provide sufficient content support for teaching. Engaging students with vivid examples can enhance their sense of interaction and participation. Transforming the concept of one-way knowledge transmission, in the online teaching of ideological and political education, the role of teachers transforms, creating a relaxed learning environment and learning experience conducive to personalized learning, allowing students' subjectivity to be demonstrated. Expanding the "broad perspective" and changing traditional classroom educational concepts. On the network learning platform for ideological and political education, the space for knowledge acquisition extends from the indoor physical space to the virtual platform space. Case studies and practical activities that align with the teaching content can be published on the learning platform to create a deep integration of online and offline modes. This enables students to communicate with the real world and online community through network resources, expanding their real-life exposure and discovering new ways of engaging in online practice and interaction.

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