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# Research on the Construction System of Teachers' Ethics and Style in Secondary Vocational Schools

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**Abstract:** This paper discusses the current situation and challenges of the construction of teachers' ethics in secondary vocational schools under the background of the new era. Based on the research on the connotation and characteristics of teachers' ethics in secondary vocational schools, the paper puts forward an innovative idea of building a "two-line, four-heart, and three-part" teacher's ethics system, and designs a leading path from two aspects of digging teachers' internal motivation and building external attraction. The paper provides scientific and reasonable suggestions and practical paths for the construction of teachers' ethics and teaching style in secondary vocational schools to promote its conformal development.

**Keywords:** Secondary vocational school; Teachers' morality and style; Construction path

**Online publication:** February 7, 2025

## 1. Introduction

Teachers are the primary resources for the development of education. Their ideological and moral quality and professional ethics are related to the success or failure of education and the future of national development. Under the background of the new era, strengthening the construction of teachers' ethics and style in secondary vocational schools and training good teachers with "four qualities" are the important foundations of building a powerful country in education.

## 2. Research background and current situation

### 2.1. The importance of the construction of teachers' ethics

Teachers are the cornerstone of the development of education. Noble teacher ethics is the key to the construction of teachers, teachers' ethics directly affect the students' learning attitude, values, and behavior habits, and are

of great significance to training the socialist builders and successors with all-round development of morality, intelligence, physical fitness, and labor for the states <sup>[1]</sup>. The state attaches great importance to the construction of teachers' ethics and has issued a series of policy documents to provide clear guidance and direction for the construction of teachers' ethics.

## **2.2. Current situation of teachers' ethics in secondary vocational schools**

Through investigation, discussion, and literature analysis, this study draws the following conclusions. Since entering the new era, the development trend of teachers' ethics in secondary vocational schools has been positive <sup>[2]</sup>. All secondary vocational schools have implemented the documents and requirements of the Ministry of Education and the Education Commission, and taken the opportunity of "double-high" construction and "double-qualified team construction" to continuously optimize the structure of teachers and improve the comprehensive quality and accomplishment of teachers. Organize teachers to participate in national training, subject teaching ability training, etc., and help teachers constantly update educational concepts and teaching methods. Regular training and assessment of teacher ethics are carried out to guide teachers to establish correct professional ethics and enhance their sense of responsibility and mission.

However, there are also some problems as follows. The degree of attention is not enough, and the construction is marginalized, as 41.6% of the schools have insufficient investment in the construction of teachers' ethics and lack the necessary funds and human support, which makes it difficult to deepen the construction of teachers' ethics.

There is also a lack of system and overall planning, as 58.3% of schools lack top-level design and effective organization in the construction of teachers' ethics, responsible departments are fighting for themselves, and it is difficult to form a joint force, resulting in superficial work and neglect of long-term training effects <sup>[3]</sup>.

Unclear assessment standards: 66.7% of the school teachers' ethics assessment standards are not clear enough, and the boundary with the annual assessment is fuzzy, resulting in the assessment of a mere formality, unable to effectively evaluate the status of teachers' ethics <sup>[4]</sup>.

Lack of incentive mechanism: 50% of schools lack the design of an incentive mechanism for the construction of teacher ethics and teacher ethics, and there is no positive correlation between positive incentives and teacher ethics, which makes it difficult to motivate teachers to attach importance to the internal motivation of teacher ethics and teacher ethics, resulting in low enthusiasm of teachers to participate in the construction of teacher ethics and teacher ethics <sup>[5]</sup>.

## **3. Research methods**

This research adopts a variety of research methods to ensure the comprehensiveness and scientific nature of the research:

### **3.1. Literature analysis**

Sorting out policy documents: Collected and sorted out 16 relevant policy documents of the Ministry of Education and Beijing Municipality on the construction of teachers' ethics since the new era, and formed the Compilation of learning materials of documents on teachers' Ethics of Beijing Landscape Architecture School in the New Era, which provided policy basis and theoretical support for the research.

Academic literature research: Through CNKI and other academic platforms, 12 papers on the construction of professional school teacher ethics systems were consulted to provide theoretical guidance for the construction of the theoretical framework of “internal and external dual lines.”

### **3.2. Questionnaire survey and discussion**

Questionnaire survey: The research group designed and distributed questionnaires for teachers, students, and parents, and collected nearly 1,000 valid samples.

Interview survey: Conducted interviews in 12 secondary vocational schools, and conducted in-depth exchanges with front-line teachers, teaching management personnel, students, etc., to understand their views and suggestions on the construction of teacher ethics.

### **3.3. Case study**

Analysis of typical cases: Taking the growth of outstanding class teachers and “Ten elite youth” teachers as cases, in-depth analysis and discussion of how to stimulate the internal power of teachers, achieve the goal of “four hearts”, and eventually grow into a “big sir” of “university inquiry, big pattern, big feelings.”

## **4. Path design and practice**

Based on the in-depth practice and careful research of the construction of teachers’ ethics and manners in secondary vocational schools, the study puts forward the theoretical system of “double lines, four hearts and three major” of teachers’ ethics and manners, and accordingly design specific paths from the two dimensions of “internal power” and “external gravity”, aiming to build a comprehensive and effective construction system of teachers’ ethics and manners.

The “double line four hearts and three major” teacher’s ethics and teacher’s style system is composed of two main lines “internal line” and “external gravity line”, which cooperate with each other and complement each other to form a force, jointly acting on the “four hearts” and finally realizing the “three” goals, that is, cultivating “big sir” of “university inquiry, big pattern, big feelings” and jointly acting on the whole process of the construction of teachers’ ethics and teacher’s style in secondary vocational colleges.

### **4.1. Stimulate endogenous power: Light up the “four hearts” lighthouse in teachers’ hearts**

First of all, determine the “four hearts” of teachers’ endogenous power. According to the research group’s research and analysis of the connotation characteristics of teachers’ ethics in secondary vocational schools in the new era, the connotation characteristics of teachers’ ethics in secondary vocational schools are that ideals and beliefs should be more prominent “beacon” attributes, moral sentiments should be more prominent “indifferent” characteristics, solid knowledge should be more prominent “integration” characteristics, and benevolence should be more prominent “tolerance” characteristics.

Practice the “red heart”, with firm ideals and beliefs as a model for students, for the students of the road of life light up the lamp.

Cultivate a “constant heart”, cultivate an ordinary heart, treat material temptation and external disturbance, and be a person of noble spirit who is content with indifference. Practicing “modesty”, never being satisfied on the road to study, constantly learning education, teaching, and professional knowledge, at the same time having

a sense of innovation, exploring different disciplines, and ideological and political integration, to achieve better education results. Cultivate “benevolence”, treat students well in all kinds of situations, be tolerant with love, and help students get through confusion.

Secondly, light the beacon of “four hearts” through two major mechanisms. The first is to build the cultivation mechanism of teachers’ ethics and style. The ideological and political quality improvement training is listed as the compulsory content of teachers’ ethics and style training, and according to the needs of different positions, personalized training is carried out to ensure the implementation of training work <sup>[6]</sup>. Improve the teacher training system and the classification, stratification, and post-training system, enhance the pertinency and effectiveness of training, and promote teachers’ lifelong learning and professional development <sup>[7]</sup>.

The second is to build an energy storage mechanism for teachers’ ethics and spirit. Through organizing cultural activities such as reading clubs, trade union lecture halls, movie watching, walking, sports games, and intangible cultural experiences, teachers are provided with effective channels for psychological adjustment, stress reduction, and energy storage. Through the establishment and improvement of teachers’ mental health education system, teachers should be helped to relieve work pressure and maintain physical and mental health <sup>[8]</sup>.

## **4.2. Guide the external attraction: build the “three major” mechanisms for the construction of teachers’ morality and style**

Construct the evaluation mechanism of teachers’ ethics, clarify the specific responsibilities in the construction of teachers’ ethics, establish a responsibility system assessment mechanism, and ensure that all tasks are effectively implemented. Strengthen the education and guidance of teachers, and improve their sense of responsibility and spirit of responsibility, so that they fully realize the importance of the construction of teachers’ ethics and spirit. Explore the evaluation method of teachers’ ethics organically integrated with performance appraisal, formulate a comprehensive evaluation mechanism involving multiple parties such as “self-declaration, student evaluation, peer evaluation, and departmental evaluation”, and regularly evaluate and evaluate teachers’ ethics <sup>[9]</sup>.

Establish a reward and punishment mechanism for teachers’ ethics, apply the evaluation results of teachers’ ethics to professional title evaluation, excellent evaluation, selection, and recommendation of key teachers, etc., to stimulate the vitality of teacher team construction. Excavating and selecting advanced models, giving full play to the exemplary role of outstanding teachers in the construction of teachers’ ethics through brand activities such as “model of teachers’ ethics”, carrying forward the fine tradition of teachers’ ethics, encouraging and guiding teachers to take advanced models as examples, forge ahead, and consciously implement the mission of cultivating talents by virtue <sup>[10–11]</sup>.

Build a supervision mechanism for teachers’ ethics, lead the supervision of teachers’ ethics through publicity work, supervise the situation of teachers’ ethics by holding warning education conferences, setting up a hotline for teachers’ ethics supervision and reporting, and a platform for exposing teachers’ ethics, etc., and give early warning of collected problems <sup>[12]</sup>. Clarify the red line of teachers’ ethics, clarify the bottom line of teachers’ ethics, and establish and improve the long-term mechanism of teachers’ ethics construction and the punishment and accountability mechanism of teachers’ ethics <sup>[13]</sup>. Educators will fully implement the “one-vote veto” system of teachers’ ethics in the selection and recruitment of teachers, career access, evaluation of professional titles, job recruitment, and evaluation and reward of teachers’ ethics.

In the end, the “two lines” cooperate with each other and work together on the “four hearts”, aiming to achieve the “three” goals: cultivating “big sir” with university questions, big patterns, and big feelings. Through

the implementation of this system, educators expect to be able to comprehensively improve the level of teachers' ethics and manners in secondary vocational schools, and contribute to the training of more outstanding talents.

## **5. Study the expected results and social impact**

The construction of a teacher ethics system has played an important role in promoting the connotative development of schools, improving the overall quality of teachers, and promoting the all-round development and growth of students. By constructing a perfect system of teachers' ethics and spirit, educators can build a team of high-quality and professional teachers, provide students with better educational resources and teaching services, and finally realize the educational goal of "cultivating morality and educating people." In the future, educators should continue to deepen the construction of teachers' ethics, constantly innovate educational models and methods, and contribute to cultivating more socialist builders and successors with all-around development of morality, intelligence, physical fitness, and labor for the states.

### **5.1. Promote the process of connotative development of the school**

Through the construction of a teacher ethics and style system, internal education and external introduction, improve the quality of teachers, promote the improvement of school education and teaching quality, and enhance the social influence and serviceability of schools.

### **5.2. Improve the overall quality of teachers**

The "two-line, four-heart and three-part" teacher ethics system starts with guiding teachers to adhere to the education policy, learn advanced education and teaching concepts, enhance teachers' professional ethics, improve teachers' education and teaching ability, and other aspects, seizing the key points of the construction of teacher ethics, guiding teachers to set an example, and seriously dealing with teachers who have problems with teacher ethics<sup>[14]</sup>. This is to ensure the purity and healthy development of the teaching team.

### **5.3. Promote the all-round development and growth of students**

By leading the construction of teachers' ethics, creating a team of "four" good teachers, guiding students to establish correct values with the feelings of a "big master", and cultivating patriotic feelings and social responsibility. By improving the professional quality and teaching ability of teachers, educators can provide students with better educational resources and teaching services, improve the comprehensive quality of students, and finally realize the educational goal of "cultivating morality and cultivating people"<sup>[15]</sup>.

## **Disclosure statement**

The authors declare no conflict of interest.

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# Experiment and Research on College English Situational Teaching Using Multimedia

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**Abstract:** College English teaching needs real situations, and the development of multimedia network technology makes situational English teaching possible. Situational Cognition Theory has enlightening significance for English teaching while multimedia network provides technical support for English teaching. The effective combination of the two will promote the development of college English teaching. Based on this, this paper mainly analyzes the characteristics and advantages of multimedia technology, and then combined with the needs of college English situational teaching, puts forward the strategies of using multimedia in college English situational teaching practice, hoping to improve students' English language application ability.

**Keywords:** Multimedia technology; College English; Situational teaching; Language application

**Online publication:** February 7, 2025

## 1. Introduction

With the development of globalization and informatization, the importance of English as an international common language has become increasingly prominent. College English teaching not only requires students to master basic language knowledge but also emphasizes the cultivation of students' language application abilities. The situational teaching method, as an effective teaching method, can enable students to learn and use the English language in a specific context by simulating the language environment. The rapid development of multimedia technology provides a richer and more vivid means for the implementation of situational teaching. Therefore, the use of multimedia in college English situational teaching practice has certain practical significance.

## 2. Advantages of multimedia technology in college English situational teaching

### 2.1. Diversified information presentation

Multimedia technology has the characteristics of diversified information. At present, the previous teaching content is usually presented in a single text, which makes it difficult to arouse students' interest in learning.

However, multimedia technology can organically combine various forms of information, thus making the teaching content rich and dynamic<sup>[1]</sup>. With the help of this technology, teachers can also present abstract concepts in the text in the form of animation or video to ensure that students can deeply understand the knowledge points. The sound elements in multimedia technology can also add more interest to teaching, such as enhancing students' auditory experience with the help of dubbing or sound effects. This diversified information presentation is conducive to attracting students' attention and stimulating their curiosity.

## **2.2. Scenario simulation reality**

In college English situational teaching, it is very important to construct a real language environment to improve students' English language application ability and cross-cultural communication ability. The scientific use of multimedia technology can make it easy for teachers to simulate all kinds of real-language scenes, such as business meetings and tourism exchanges. In these simulated scenes, students can experience the ways of language use in different contexts and master communication skills through observation and imitation<sup>[2]</sup>. On this basis, multimedia technology can also provide timely feedback and correction to help students improve their ability in practice. This situational teaching model can not only strengthen students' language use ability but also help to cultivate students' awareness of cross-cultural communication.

## **2.3. Strong interactivity**

Multimedia technology also has strong interactivity, which is one of its important characteristics different from the traditional teaching mode. In traditional classroom teaching, teachers are often the transmitter of information, while students are the receiver of information. The interaction between the two sides is limited. Multimedia technology breaks this one-way information transmission mode and realizes the real-time interaction between teachers and students<sup>[3]</sup>. For example, teachers can design various types of interactive teaching activities, which can not only stimulate students' enthusiasm for learning but also promote cooperation and communication between students. Most importantly, multimedia technology can be intelligently adjusted according to students' learning progress, making teaching more personalized.

# **3. Strategies for using multimedia in college English situational teaching practice**

## **3.1. Designing multimedia situational teaching materials**

In the process of using multimedia in college English situational teaching practice, it is crucial to design multimedia situational teaching materials that meet the student's cognitive characteristics. This link not only directly affects the teaching effect, but also relates to whether students can master language knowledge and improve language application ability in a relaxed and pleasant atmosphere<sup>[4]</sup>. First, the design of multimedia situational teaching materials should focus on the teaching content. Teachers should clarify the key and difficult points of this lesson according to the syllabus. For example, when explaining tourism in English, they can design multimedia teaching materials around hotel check-in, scenic spot introduction, shopping exchange, and other links in tourism; Second, teaching materials should conform to students' cognitive characteristics. College students already have a certain foundation in English, but some students lack interest in abstract content<sup>[5]</sup>. Therefore, when designing teaching materials, teachers should pay attention to the interest and practicability of the materials, attract students' attention, and stimulate their interest in learning through multimedia elements such as vivid images, real sounds, and interesting videos.

Multimedia situational teaching materials should contain rich text, images, sounds, videos, and other information, and the text part should be concise and clear, highlighting the key information. The image part should be vivid and able to intuitively display the teaching content. The voice part should be clear and natural, that is, standard pronunciation, real dialogue, background music, and so on. The video part needs to select clips to ensure that they can truly reflect the scene and cultural background of language use. Take “hotel check-in” in tourism English as an example, teachers can design the following multimedia situational teaching materials.

The text section provides common words and sentence patterns for hotel check-in, such as “check-in”, “reservation”, “double room”, etc., with brief explanations in Chinese. Images need to show pictures of various scenes of the hotel, which can be the front desk or the guest room, to help students intuitively understand the hotel environment and process. The voice can play a recording of the conversation between the hotel front desk and guests so that students can feel the real scene of language communication, and guide students to imitate<sup>[6]</sup>. The video part should select an English teaching video of hotel check-in so that students can learn English expressions about hotel check-in while watching the video.

This design method can intuitively present the teaching content, stimulate students’ learning initiative, and let students learn knowledge in a relaxed and pleasant environment. At the same time, these materials can also be used as resources for after-school review and autonomous learning to help students consolidate what they have learned and improve the learning effect.

### **3.2. Creating a multimedia situational teaching environment**

In the process of college English situational teaching practice using multimedia, it is very important to create a multimedia situational teaching environment that conforms to the teaching content and objectives<sup>[7-8]</sup>. This environment can not only simulate the real or near real language environment but also enable students to learn and use language in a specific context, to effectively improve their language application ability and cross-cultural communication ability. To effectively build a multimedia situational teaching environment, teachers should correctly use multimedia equipment, such as projectors, audio systems, interactive whiteboards, or various multimedia teaching software, through which text, images, videos, and other information forms can be integrated into classroom teaching, to build an immersive language learning environment for students. In addition, the creation of a multimedia situational teaching environment should pay attention to the authenticity of the environment, that is, to ensure that the environment is close to the real language use scene, for example, in the process of explaining business English, teachers can use multimedia technology to build a simulated business meeting environment, the specific method is as follows.

Make effective use of the classroom layout to place tables and chairs in the shape of a meeting room; Use the projector or interactive whiteboard to show the background information of the business meeting, mainly including the company profile, meeting agenda, and product introduction, so that students can intuitively understand the meeting content; 4. Arrange students to carry out role play to simulate the real business meeting process, so that students can correctly use business English to express themselves in practical activities<sup>[9]</sup>; Using the interactivity of multimedia technology, college English teachers can set up question and answer sessions to enhance students’ sense of participation. Through the construction of such a multimedia situational teaching environment, students can learn to use the English language in the simulated context, which has a certain role in promoting students’ intercultural communication ability and team cooperation ability.

### **3.3. Implementing multimedia situational teaching activities**

In the development stage of college English teaching, the ingenious combination of multimedia technology and situational teaching activities can build an interactive learning environment for students. Role-play is a situational teaching activity that is very influenced by the environment. In this activity, students will be assigned different roles, which can be tourists or business people, and they will play roles according to the set situation. To strengthen the authenticity of the activities, teachers should use multimedia equipment to show students a three-dimensional language environment. For example, in the process of teaching intercultural communication courses, teachers should select an international conference scene and use multimedia to show the representatives of different countries, conference agendas, and cultural backgrounds<sup>[10-11]</sup>. In addition, multimedia technology can also play an important role in simulated dialogue, such as providing dialogue demonstrations through audio or video materials or allowing students to practice online dialogue through interactive software. Taking tourism English as an example, teachers can design a tourism consultation situation and display the scene and dialogue template of tourism consultation through multimedia. Students will act as tourist consultants and tourists and practice simulated dialogue, to be familiar with the expression and communication skills of tourism English.

## **4. Challenges and countermeasures of multimedia technology in college English situational teaching practice**

### **4.1. Challenges**

In the deep exploration of integrating multimedia technology into college English situational teaching practice, many challenges are inevitably encountered. These challenges are not only related to the complexity of technical operations but also related to the acquisition, integration, and effective use of teaching resources, which puts forward higher requirements for teachers' professional quality and teaching innovation ability.

#### **4.1.1. high technical threshold**

The rapid development of multimedia technology has brought unprecedented changes to English teaching, but it also puts forward higher requirements for teachers' technical ability. To make full use of multimedia equipment for teaching, teachers not only need to have basic computer operation ability but also need to master the use skills of various multimedia teaching software, such as PowerPoint production, animation production, interactive whiteboard applications, and so on. In addition, to produce multimedia teaching materials that meet teaching needs and are attractive, teachers also need to master certain multimedia material production skills, including image processing, audio editing, video editing, and other professional skills<sup>[12]</sup>. However, the reality is that not all teachers have these skills, especially those with older or weaker technical backgrounds, who need to invest a lot of time and energy in learning and practice to keep up with the pace of multimedia teaching.

#### **4.1.2. Limited teaching resources**

Although multimedia technology provides unlimited possibilities for English teaching, high-quality multimedia teaching resources are relatively scarce. Although there are a variety of multimedia teaching resources on the market, there are not many high-quality resources that meet the needs of college English situational teaching, can match the actual level of students, and are innovative and practical<sup>[13-14]</sup>. At the same time, due to the limitations of copyright protection, technical barriers, and other factors, some excellent multimedia teaching resources are difficult to be widely obtained and utilized. This requires teachers and students to spend a lot of

time and energy to search, screen, and integrate teaching resources, which undoubtedly increases their workload and burden.

## **4.2. Countermeasures**

### **4.2.1. Strengthen teacher training and improve technical ability**

In the stage of college English teaching, to improve teachers' ability to use multimedia technology to produce teaching materials, educators should comprehensively strengthen their computer operation ability. In the process, the school should regularly organize and carry out relevant technical training, mainly including the basic operation of multimedia teaching software, advanced function application, multimedia material production, teaching design implementation, etc. With the help of system training, teachers can update their knowledge and improve, to provide strong support for the development of multimedia situational teaching. On this basis, teachers should also be encouraged to participate in relevant academic exchanges, share teaching experiences with peers in the exchange, and jointly explore the application and innovation of multimedia technology in English teaching.

### **4.2.2. Share teaching resources and promote resource integration**

To solve the problem of limited multimedia teaching resources, schools can build a multimedia teaching resource library to realize the sharing and utilization of teaching resources. The resource library should include all kinds of multimedia teaching software, such as topics, audio and video, pictures, etc., and teachers can select suitable teaching materials from the resource library according to teaching needs<sup>[15]</sup>. On this basis, teachers can also upload their teaching resources to the resource database, forming a virtuous circle of resources, to improve the quality of multimedia situational teaching.

## **5. Conclusion**

Combined with the full text, the scientific application of multimedia technology in college English teaching is conducive to improving the effect of situational teaching and strengthening students' interest in learning and awareness of cross-cultural communication. However, it should be noted that this technology still faces many challenges in college English situational teaching practice, which need to be solved by teachers and students. With the continuous progress of multimedia technology, the application of multimedia technology in college English situational teaching will be more in-depth.

## **Disclosure statement**

The author declares no conflict of interest.

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# Research on the Strategies of Construction and Utilization of School Sports Facilities in the Context of a Strong Sports Nation

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**Abstract:** Building a strong sports nation is the goal and task of reforming and developing China's sports work in the new era. With the continuous advancement of China's education reform, the education sector has paid more attention to sports. Schools are the cradle for cultivating future pillars, especially school sports facilities, which are important carriers for cultivating students' healthy bodies and shaping a good lifestyle. Their construction and management are of irreplaceable importance for achieving the goal of national fitness and promoting social harmony and stability. Therefore, in this context, the discussion and analysis of the current status and development path of school sports facilities in the construction of a strong sports nation can fully improve China's school education in the new era, and at the same time contribute to the long-term development of China's sports industry.

**Keywords:** Sports power; School sports facilities; High school sports

**Online publication:** February 7, 2025

## 1. Related concepts

### 1.1. A strong sports nation

A sports power refers to a state in which a country has made outstanding achievements in the field of sports and sports occupy an important position in the country's overall development strategy. This concept not only emphasizes the country's outstanding performance in international sports events but also includes the widespread popularization and popularization of sports culture in the country. The realization of a sports power requires the comprehensive promotion of the development of sports, including the construction of basic sports facilities, the cultivation of sports talents, sports scientific research and innovation, etc. Under the strategy of becoming a sports power, the country usually increases policy support and investment in sports and carries out national fitness activities to improve the physical fitness of the people, the national

image, and the overall national strength <sup>[1]</sup>.

## **1.2. School sports facilities**

School sports facilities refer to the venues and equipment necessary for students to exercise, compete in sports, and teach physical education. These facilities include sports fields, gymnasiums, swimming pools, etc. Their main purpose is to comprehensively encourage students to exercise and cultivate their interest in sports. The quality and quantity of school sports facilities are directly related to the quality of students' sports activities and are of great significance for cultivating students' physical fitness, teamwork ability, and healthy living habits. Under the strategy of building a strong sports nation, the construction of school sports facilities will become a key link, directly affecting the cultivation of future sports talents and the improvement of the country's overall sports level <sup>[2]</sup>.

## **2. Analysis of the current situation of school sports facilities construction**

### **2.1. Some of the school's sports equipment is monotonous and old**

Inadequate and aging facilities pose a significant barrier to the provision of quality physical education. Many schools across the country struggle with outdated and dilapidated infrastructure, including dilapidated playing fields, outdated gymnasiums, and inadequate equipment. These substandard facilities not only put students' safety at risk but also limit the range of sports activities that can be offered.

In most schools, sports facilities are mainly ball sports equipment, such as basketball hoops and football goals. This single layout of sports facilities limits the diversity and innovation of sports teaching content. For example, the lack of professional facilities required for track and field, swimming, gymnastics, and other projects means that school physical education is often limited to the most common and easiest to organize ball games. This situation is not conducive to the comprehensive development of students' physical fitness, nor is it conducive to cultivating students' interests and hobbies in various sports activities. In addition, due to limited resources, schools often give priority to projects that are more universal and easier to popularize, resulting in some special sports projects and facilities being neglected <sup>[3]</sup>.

### **2.2. Irrational planning of school sports facilities**

Lack of proper planning and space allocation for sports facilities in schools leads to cramped or poorly designed sports areas. This not only affects the quality of physical education teaching but also reduces the overall experience of students participating in sports activities. Additionally, the lack of multi-purpose spaces limits the versatility of facilities and hinders their ability to accommodate a variety of sports and recreational activities.

### **2.3. There is a big difference in sports facilities between urban and rural schools**

The difference in sports facilities between regions is also an issue that cannot be ignored, especially the gap between rural and urban areas. In many rural schools, due to funding and geographical limitations, there is a lack of suitable indoor sports venues. This means that in bad weather conditions, there is little space for students to engage in physical exercise. For example, some schools in mountainous areas or remote rural

areas lack sufficient financial and technical support to build and maintain indoor sports facilities due to their remote geographical location. This not only affects the frequency and quality of students' physical exercise but also limits the diversity of physical education teaching content. In contrast,

Schools in urban areas usually have more complete and modern sports facilities, such as standard indoor basketball courts, badminton halls, etc., which to some extent exacerbates the inequality in sports education resources between urban and rural areas.

## **2.4. Lack of professional teachers and low utilization of sports facilities**

The effective use of sports facilities depends not only on the facilities themselves but also on the availability of professional instructors. Currently, many schools are facing a shortage of professional physical education teachers, which directly affects the quality of physical education courses and the full utilization of facilities. In addition, professional teachers are not only able to teach skills, but also provide important guidance on safety, especially when using some special equipment. The lack of such professional guidance may increase the risk of students being injured during sports activities. Low facility utilization means that resources are seriously underutilized and opportunities to promote student physical activity are missed. This low utilization rate not only wastes valuable resources but also misses the opportunity for students to promote a healthy lifestyle and alleviate the problem of sedentary behavior.

## **2.5. Physical education focuses on theory rather than practice**

In some schools, the setting of physical education courses is often formalistic, focusing on theoretical teaching and neglecting practical operations. This results in that even if the school has good sports facilities, they cannot fully play their role. In short, this lack of professional instructors limits the effective use of school sports facilities, reduces the overall effect of physical education teaching, and also affects students' participation and interest in sports activities. To solve this problem, it is necessary to start with improving the professional level and number of physical education teachers, and at the same time improve the design of physical education courses so that they pay more attention to practice and the all-round development of students.

# **3. Optimization strategies and suggestions**

## **3.1. Strengthen policy support and financial investment**

To address the slow pace of updating school sports facilities and the outdated nature of some equipment, policy support and funding mechanisms must be strengthened. This involves improving existing policies and regulations while allocating more financial resources to support the development and maintenance of school sports infrastructure. This requires a multifaceted approach, including government funding and partnerships with the private sector. Governments at the national, regional, and local levels should commit to allocating a larger proportion of their budgets to supporting the construction, renovation, and maintenance of school sports facilities. This can be achieved through dedicated funds specifically for sports infrastructure projects or through incentive programs that encourage schools to prioritize the development of sports facilities.

### **3.2. Scientific planning and design of sports venues**

First, scientific planning of the layout of sports facilities requires careful assessment of the size and requirements of the school to determine the best configuration of sports venues. This includes considering factors such as student population, available space, and budget constraints to develop a layout that is both practical and efficient.

Secondly, improving the versatility of sports venues is essential to maximizing their utility and making the most of site resources. This involves designing facilities that can accommodate a variety of sports and activities, thereby minimizing the need for separate venues for each sport. In addition, by improving the versatility of venues and making the most of site resources, planners can maximize the utility and sustainability of school sports facilities, ensuring that they remain a valuable asset to schools for years to come.

Finally, school sports facilities should cover a variety of sports types to meet the interests and needs of different students. In terms of professional facility construction, schools should ensure that the facilities meet national sports standards and use high-quality, durable materials to ensure student safety<sup>[4]</sup>.

### **3.3. Strengthen the application of digital technology to narrow the gap in sports facilities between urban and rural schools**

In terms of strengthening the application of digital technology, schools can enrich and improve facilities by introducing various high-tech equipment and systems. For example, smart wearable devices can be used to monitor students' heart rate, steps, movement trajectory, and other data during exercise, which can help students better understand their physical condition and exercise effects. In addition, schools can also use mobile applications to record students' exercise data and provide them with personalized exercise suggestions. At the same time, schools can use virtual reality (VR) and augmented reality (AR) technology to simulate different sports scenes, such as virtual skiing, virtual archery, etc., which can not only increase the fun of physical education courses but also provide a safer learning environment and create virtual sports facilities. For example, through VR technology, students can experience high-risk sports such as rock climbing and parachuting without actual risks. At the same time, digital technology can also help teachers manage physical education courses more effectively, such as electronic roll-call systems, online attendance and grade management, etc. In addition, schools can also use online platforms to hold virtual sports events, such as virtual running competitions, virtual basketball games, etc., which can not only stimulate students' competitive interest but also provide a wider competition platform for students to communicate and compete with students from different schools. The integration of these technologies can not only improve the quality and diversity of sports facilities but also cultivate students' understanding and ability to use technology, helping them better adapt to the digital age in their future studies and lives.

### **3.4. Establish a reasonable usage system to improve the efficiency of facility utilization**

Start with improving the professional level and number of physical education teachers, while improving the design of physical education courses to make them more focused on practice and the all-round development of students.

Improving the efficiency of school sports facilities is essential to ensure their long-term sustainability and maximize the benefits to students and the community. This includes taking steps to strengthen maintenance and management measures while strengthening cooperation with social resources to improve the utilization of facilities. First, strengthening the maintenance and management of facilities is essential to extending their service life and preventing their premature deterioration. This includes establishing regular inspection and maintenance plans to identify and solve any problems in a timely manner. By performing routine inspections of equipment, surfaces, and infrastructure, maintenance staff can detect wear and tear early and take preventive measures to avoid expensive repairs or replacements. In addition, investing in high-quality materials and equipment, as well as hiring skilled maintenance staff, can help ensure that facilities remain safe, functional, and beautiful for years to come. In addition, strengthening facility management involves implementing effective reservation and scheduling systems to optimize the use of available space and resources. By adopting digital reservation platforms or software solutions, schools can streamline the process of booking sports venues, coordinating activities, and managing resources such as equipment and personnel. This not only reduces administrative overhead, but also improves transparency and accessibility, making it easier for students, faculty, staff, and community members to access and utilize sports facilities. Strengthening docking with social resources is essential to expanding facility utilization channels and maximizing their community impact. This includes building partnerships with local sports clubs, community organizations, and government agencies to tap into their resources, expertise, and networks.

To maximize the utilization of school sports facilities, a well-thought-out usage system must be in place. Comprehensive and flexible scheduling is key to ensuring that school sports facilities are used effectively. School sports facility scheduling should take into account the various needs of different groups, including physical education classes, sports teams, extracurricular activities, and students. To optimize scheduling, schools can use digital booking systems that allow students to book time slots for specific facilities. This not only helps avoid double bookings but also allows scheduling to be adjusted as needed. In addition, schedules should include designated maintenance times to ensure that facilities are always in good condition. Establishing clear usage rules and a sound management system is key to maintaining order and ensuring the longevity of sports facilities. Usage rules cover aspects such as dress, behavior, equipment handling, and safety. At the same time, there should be a management system to enforce usage rules and resolve any problems that arise. This system can include staff assigned to monitor facility usage, maintain equipment, and provide assistance when needed. To maximize utilization, schools should consider opening sports facilities to the public after school hours. Renting facilities to local sports clubs, and social organizations, or even hosting public events. These initiatives not only increase usage but also bring additional income for the maintenance and upgrading of sports facilities.

### **3.5. Actively organize sports events and encourage students to participate**

In the context of a strong sports nation, the development and utilization of school sports facilities should pay more attention to actively carrying out sports events to improve students' enthusiasm and participation in sports. For example, schools should regularly hold various sports events, such as inter-school games, basketball leagues, football-friendly matches, etc., to provide students with a wide range of opportunities to participate. These events are not only a platform for displaying sports skills, but also an important way to

cultivate team spirit and school cohesion. For example, by regularly holding basketball leagues, students' basketball skills can be improved, competition and cooperation between classes can be strengthened, and students' sense of collective honor can be enhanced. Secondly, schools can adopt innovative ways to hold sports events, such as introducing emerging sports (such as street dance, extreme sports, etc.). In addition, schools should also actively use modern scientific and technological means, such as live broadcasting of competitions through campus websites or social media platforms, to increase the viewing and interactivity of the competition. In this process, to better stimulate students' enthusiasm for participation, schools can also set up various awards, such as the best athlete award and the team spirit award, to commend students and teams who have performed well in sports activities.

Schools should also encourage teachers and parents to actively participate in sports events, not only as spectators to support students but also as coaches or referees to participate in the organization and operation of the game. This model of home-school cooperation can not only strengthen the connection between students, parents, and teachers but also create a healthier and more positive sports atmosphere for students. Through the implementation of these measures, schools can effectively increase students' interest and participation in sports activities, promote their physical and mental health, and at the same time improve the efficiency and benefits of the use of school sports facilities <sup>[5]</sup>.

## 4. Conclusion

In the context of a strong sports nation, the construction and management of school sports facilities are of vital importance. The strategies and suggestions proposed in this article are aimed at optimizing facilities, encouraging students to form good exercise habits, and promoting the development of school sports facilities. It is hoped that these measures will contribute to the sustainable development of school sports and the all-round growth of students.

## Disclosure statement

The author declares no conflict of interest.

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ground of a Strong Sports Nation. Stationery and Sports Supplies and Technology, 2023(23): 160–162.

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# Exploring the Ideological and Political Teaching Model in the Course of “Reading Concrete Construction Drawings with Plane Method”

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**Abstract:** The construction of the ideological and political teaching model is an essential component of higher education in the new era. Through this model, ideological and political education can be effectively integrated into professional courses, forming a collaborative education model that strengthens students’ professional skills and enhances their ideological and political literacy, thus high-quality talent training tasks can be achieved. Therefore, to further improve the educational quality of the “Reading Concrete Construction Drawings with Plane Method” course, it is necessary to vigorously promote the construction of the ideological and political teaching model, effectively realizing the deep collaboration between professional courses and ideological and political education. This allows students to substantially encounter rich ideological and political knowledge while strengthening their professional abilities, thereby improving their overall quality. In this paper, we analyze the current problems in the ideological and political teaching of the “Reading Concrete Construction Drawings with Plane Method” course and propose corresponding countermeasures for discussion and exchange.

**Keywords:** “Reading Concrete Construction Drawings with Plane Method”; Ideological and political teaching in courses; Model

**Online publication:** February 7, 2025

## 1. Preface

In the new era, the value of talent cultivation in higher education has become increasingly prominent. It is necessary to focus on cultivating excellent talents with comprehensive development of morality, intelligence, physical fitness, aesthetics, and labor during the higher education stage, thus providing more outstanding socialist successors and builders for the construction and development of our society. Therefore, as an important starting point for achieving this educational goal, the importance of ideological and political courses has become increasingly prominent and has become a hot spot for universities in advancing education reform. Hence, vigorously constructing the ideological and political model of the “Reading Concrete Construction Drawings

with Plane Method” course has become a top priority during the education stage. The construction of this model helps to achieve synergy between professional knowledge and ideological and political education, thereby effectively cultivating students’ comprehensive quality, improving their professional abilities and ideological and political qualities, and enabling them to grow into compound talents needed for the development of the engineering construction field.

## **2. Overview of the ideological and political teaching model in courses**

The ideological and political teaching model in courses refers to a comprehensive educational concept that promotes the integration of various courses with ideological and political education, forms synergies between courses, and effectively takes moral education as the fundamental task of education by constructing a full-scale, full-course, and full-process education pattern. This model emphasizes the cultivation of students’ ideological and political qualities, moral character, and social responsibility while imparting professional knowledge. Through this educational model, the organic unity between knowledge imparting and value guidance can be effectively achieved, improving the level and effectiveness of talent cultivation.

Essentially, the ideological and political teaching model in courses effectively breaks the limitations of traditional educational models. It can effectively integrate professional course education with ideological and political education, and integrate ideological and political elements into the entire professional course teaching, forming synergies between courses. This achieves the educational effect of cultivating students’ social responsibility and strengthening their ideological and moral qualities, thereby promoting students’ comprehensive development.

## **3. The Significance of constructing the ideological and political teaching model in the “Reading Concrete Construction Drawings with Plane Method” Course**

### **3.1. Enhancing students’ comprehensive quality and professional ethics**

In the education of the “Reading Concrete Construction Drawings with Plane Method” course, the integration of ideological and political elements is of crucial significance and value. It is also a key link in improving the level and quality of talent cultivation.

Therefore, the importance of promoting the construction of the ideological and political model for this course is increasingly prominent, and it is also the top priority for strengthening students’ comprehensive quality and professional ethics. In practice, as one of the core courses for civil engineering majors, the “Reading Concrete Construction Drawings with Plane Method” course not only requires students to have a solid foundation of professional knowledge but also demands good practical abilities and professional literacy.

Thus, integrating ideological and political education into this course has important value and significance. Through the integration of ideological and political knowledge, students’ outlook on life, values, and worldview can be cultivated, gradually promoting the formation of a good sense of social responsibility and professional ethics, and thus achieving the goal of enhancing the level and quality of talent cultivation.

### **3.2. Promoting the deep integration of professional knowledge and ideological and political education**

The most significant advantage of constructing the ideological and political education model in courses lies

in integrating professional course knowledge and ideological and political knowledge. The integration of professional courses and ideological and political knowledge has formed a more complete education model, breaking the limitations of traditional professional course education. In the traditional education model of the “Reading Concrete Construction Drawings with Plane Method” course, teachers often focus on imparting professional knowledge and do not pay attention to cultivating students’ professional ethics. This leads to poor educational effectiveness and relatively low quality.

However, by constructing the ideological and political model for this course, the professional knowledge of the “Reading Concrete Construction Drawings with Plane Method” course and ideological and political knowledge can be deeply integrated, achieving a deep fusion of the two. This allows for the exploration of ideological and political elements in the course of education, such as cultivating a sense of responsibility and craftsmanship in engineering case studies. As a result, students can develop a sense of professional ethics in their professional course studies, enhancing their professional literacy under the influence of ideological and political knowledge and completing the educational tasks of the “Reading Concrete Construction Drawings with Plane Method” course with high quality.

## **4. Current issues in the ideological and political teaching of the “Reading Concrete Construction Drawings with Plane Method” course**

### **4.1. Disconnect between ideological and political goals and professional goals**

In the current construction of the ideological and political teaching model for the “Reading Concrete Construction Drawings with Plane Method” course, a significant issue is the disconnect between ideological and political teaching goals and professional teaching goals. This problem impacts the efficiency of the ideological and political model construction and makes it difficult to enhance students’ professional abilities and vocational literacy.

In practice, the teaching of the “Reading Concrete Construction Drawings with Plane Method” course often does not focus on ideological and political knowledge but rather treats it as an additional component to the professional knowledge learned in the course, rather than an integral part closely linked to professional knowledge. Therefore, during the professional knowledge explanation stage, teachers do not timely explore ideological and political elements related to professional ethics, safety awareness, social responsibility, and professional literacy. This leads students to focus solely on mastering professional knowledge and skills, lacking a deep understanding and appreciation of the value of ideological and political knowledge, which weakens the quality and effectiveness of teaching.

### **4.2. Lack of systematic planning for the integration of ideological and political content**

During the construction phase of promoting the ideological and political model for the “Reading Concrete Construction Drawings with Plane Method” course, a significant issue is the lack of systematic planning for the integration of ideological and political content, which undermines the effectiveness of talent cultivation. In practice, although some teachers attempt to integrate ideological and political knowledge into the course, due to the absence of comprehensive planning and systematic teaching design, the integration of ideological and political knowledge often appears fragmented and fails to form a complete educational system. Consequently, students’ learning and exploration of ideological and political knowledge often lack continuity and deep logical coherence, making it difficult to help students build a comprehensive knowledge chain and affecting

the formation of their professional literacy and social responsibility. Therefore, how to systematically integrate ideological and political content into the “Reading Concrete Construction Drawings with Plane Method” course has become an important educational task.

### **4.3. Insufficient motivation for students to learn ideological and political knowledge**

A significant challenge faced during the construction phase of the ideological and political teaching model for the “Reading Concrete Construction Drawings with Plane Method” course is the relatively insufficient motivation for students to learn ideological and political knowledge.

How to effectively stimulate students’ interest and subjective initiative has become the key to constructing this teaching model. In practice, this is mainly manifested in students’ inadequate understanding and misinterpretation of ideological and political knowledge. For example, some students believe that ideological and political knowledge is not closely related to the learning of the “Reading Concrete Construction Drawings with Plane Method” course content, and thus they often have little interest in deep interpretation and analysis of this knowledge, making it difficult to form a deep understanding.

Furthermore, in the current ideological and political education model of the course, teachers’ interpretation of ideological and political knowledge is often relatively dull, relying solely on didactic classroom teaching methods. This leads to poor learning outcomes for students and may even cause resistance. Therefore, enhancing the interest of the ideological and political teaching model and stimulating students’ learning motivation have become critical steps.

### **4.4. Lack of evaluation mechanism for ideological and political teaching effectiveness**

The relatively absent evaluation mechanism for teaching effectiveness is an important issue in the construction of the ideological and political teaching model for the “Reading Concrete Construction Drawings with Plane Method” course, affecting the effectiveness of the course education and the quality of talent cultivation<sup>[1]</sup>. In practice, the current evaluation index system for the ideological and political teaching model of the course is not comprehensive, and the scientific rigor of evaluation methods is relatively insufficient. Although teachers attempt to integrate ideological and political elements into the course, the assessment methods adopted are still traditional and solely rely on students’ final grades as a basis for reflecting their learning achievements. However, this simplistic evaluation cannot reflect the effectiveness of the integration of ideological and political knowledge. Therefore, it is necessary to effectively improve and refine the current teaching effectiveness evaluation mechanism to ensure that the ideological and political teaching model of the “Reading Concrete Construction Drawings with Plane Method” course can achieve good results.

## **5. Countermeasures for the construction of the ideological and political teaching model in the “Reading Concrete Construction Drawings with Plane Method” course**

### **5.1. Clarifying the path of integration between ideological and political education and professional knowledge**

During the construction phase of the ideological and political teaching model for the “Reading Concrete Construction Drawings with Plane Method” course, the primary task is to clarify the integration path between ideological and political education and professional knowledge teaching. This enables teachers to

deeply integrate professional teaching with ideological and political teaching, enhancing the effectiveness of ideological and political construction in the course. Therefore, when designing the course, teachers need to focus on incorporating ideological and political elements and include them in the overall planning of the course, thus achieving a tight integration between ideological and political education and professional knowledge teaching<sup>[2]</sup>.

In practice, teachers are required to explore the ideological and political elements present in the current “Reading Concrete Construction Drawings with Plane Method” course, such as engineering ethics, safety knowledge, and craftsmanship spirit. Exploring these elements helps to improve students’ comprehensive qualities and cultivate their professional ethics. For example, when explaining knowledge related to the interpretation of concrete construction drawings using the plane method, teachers can consider combining actual engineering cases to guide students in thinking and exploring how to ensure engineering quality while adhering to national standards. This gradually leads students to develop a sense of social responsibility and professional ethics, achieving deep integration of ideological and political elements in the course.

## **5.2. Constructing a hierarchical system of ideological and political content**

During the construction phase of the ideological and political teaching model for the “Reading Concrete Construction Drawings with Plane Method” course, teachers should fully focus on extracting and condensing ideological and political elements. They should also ensure that these elements are hierarchically integrated into the course, forming a clear and structured system of ideological and political education content. To achieve this, teachers can divide the ideological and political elements into different levels and dimensions, creating coherent and logically rigorous ideological and political education content<sup>[3]</sup>. For instance, teachers can categorize the ideological and political content into different levels such as basic, expansion, and deepening layers based on the educational objectives of the course and the student’s professional ability foundations.

The basic layer can include the integration of socialist core values and professional ethics, while the expansion layer can enhance the fusion of professional knowledge with ideological and political elements like engineering ethics and safety awareness. The deepening layer should focus on cultivating students’ ideological and political literacy and comprehensive abilities, such as strengthening their critical thinking and innovative thinking skills. By implementing a hierarchical system of ideological and political content, the quality of ideological and political education in the “Reading Concrete Construction Drawings with Plane Method” course can be effectively improved, thereby enhancing the quality and effectiveness of talent cultivation.

## **5.3. Stimulate students’ initiative and enthusiasm in ideological and political learning**

Students’ initiative and enthusiasm for learning play a decisive role in the implementation of the ideological and political education model in the course “Interpretation of Concrete Structural Drawings Using the Plane Method.” Therefore, in teaching practice, it is necessary to focus on stimulating students’ initiative in ideological and political learning, making them more actively engaged in exploring and researching knowledge, and ultimately achieving higher-quality education in the course.

To this end, teachers’ primary task is to innovate teaching methods, comprehensively utilizing diversified approaches to advance the ideological and political education model in the course, such as case-based teaching, discussion-based teaching, flipped classroom teaching, and many more. Through various new teaching models, students’ subject status in the course can be highlighted, thereby stimulating their interest and subjective

initiative in learning. For example, when explaining the interpretation of concrete structural drawings using the plane method, teachers can guide students to conduct group discussions through practical engineering cases, allowing them to analyze the ideological and political elements and professional knowledge in the discussions, thus deepening their understanding and identification. Furthermore, teachers should also emphasize strengthening practical aspects in the ideological and political construction of the course, exploring the ideological and political elements in practical settings.

For example, simulating construction sites in training bases allows students to experience the practical application of professional knowledge and appreciate ideological and political elements such as engineering ethics and safety awareness, thereby enhancing the effectiveness of ideological and political education in the course and improving the level of talent cultivation.

#### **5.4. Establish and improve the evaluation and feedback mechanism for ideological and political teaching effects**

Vigorously building an evaluation and feedback mechanism for the effectiveness of ideological and political education in courses is an important measure, and it is also a key link in promoting the dynamic improvement and refinement of the ideological and political education model in the course “Interpretation of Concrete Structural Drawings Using the Plane Method.” Therefore, teachers are required to construct a diversified educational evaluation system, comprehensively utilizing student self-evaluation, peer evaluation, and teacher evaluation to conduct a comprehensive assessment of students’ ideological and political learning effects. This reflects students’ actual situations in various aspects and dimensions of ideological and political learning, such as knowledge mastery, ability improvement, and emotional attitudes.

Afterward, teachers should comprehensively use questionnaires, symposiums, and other methods to fully understand and collect students’ feedback and learning achievements, reflecting their specific opinions and suggestions on the ideological and political model construction of the course. This will provide corresponding data references for the improvement and refinement of subsequent course teaching models, ensuring that the ideological and political model of the course can be dynamically innovated and improved, and enhancing the quality and effectiveness of education.

### **6. Conclusion**

In summary, the construction of the ideological and political education model in the course “Reading Concrete Construction Drawings with Plane Method” is of utmost importance. Through this model, professional knowledge teaching and ideological and political teaching can be deeply integrated, achieving the effect of improving students’ professional abilities and ideological and political literacy. Therefore, this paper analyzes the challenges faced in the current construction of the ideological and political education model in the course and proposes corresponding improvement measures based on these challenges. These measures are aimed at promoting comprehensive student development and enhancing the quality of talent cultivation.

### **Funding**

Teaching Reform Project: Exploration and Practice of the Ideological and Political Teaching Model of Courses Based on “One Core, Two Lines, Four Dimensions” — Taking the Course “Reading Concrete Flat Construction

Drawings” as an Example (Project No. Z233315S).

## Disclosure statement

The author declares no conflict of interest.

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# Enhancing Practical Teaching Models for College Students Through Industry-University Cooperation

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**Abstract:** With the rapid development of higher education, industry-university cooperation has emerged as a crucial approach to enhancing the practical and innovative abilities of college students. However, the current practical teaching model for college students faces significant challenges and problems in the context of industry-university collaboration. On one hand, the teaching model suffers from fundamental deficiencies, including a disconnect between theory and practice, low levels of enterprise participation, and insufficient cultivation of students' practical abilities. On the other hand, specific issues such as a single cooperation model, mismatched teaching content with enterprise requirements, and a lack of practical platforms further constrain the effective enhancement of students' practical skills. Experimental testing conducted in this study revealed that the measures applied to the experimental group positively impacted students' practical and innovative abilities, leading to higher innovation scores in the experimental group compared to the control group.

**Keywords:** Industry-academia cooperation; College student practice; Teaching model; Innovation ability

**Online publication:** February 7, 2025

## 1. Introduction

With the acceleration of globalization and continuous technological advancements, the demand for high-quality talent in society has become increasingly urgent. However, the existing practical teaching model for college students exhibits numerous shortcomings, including a disconnect between theoretical knowledge and practical application, limited participation from enterprises, and inadequate cultivation of students' practical abilities. These challenges significantly hinder the quality and societal adaptability of talent development.

This study begins by introducing the background and significance of industry-university cooperation while identifying the challenges associated with the current practical teaching model for college students. It then clarifies the purpose and significance of the research. Following this, the study elaborates on specific research

components, including the exploration of industry-university cooperation applications, the construction and implementation of practical teaching models for college students, and related aspects. Through experimental testing, this study provides an in-depth analysis and discussion of the resulting data. Finally, it summarizes the research findings, highlights existing limitations, and proposes directions for future improvement.

## 2. Related work

In recent years, extensive research has been conducted both domestically and internationally on the practical teaching modes for college students in the context of industry-university cooperation. It is widely acknowledged that industry-university cooperation effectively enhances students' practical and innovative abilities and fosters a closer connection between talent cultivation and societal needs.

Awasthy *et al.* <sup>[1]</sup> proposed improving the cooperation framework between universities and industries to address issues such as limited collaboration models and ineffective outcomes. Giang *et al.* <sup>[2]</sup> explored the preparedness of higher education institutions for digital transformation toward Industry 4.0, aiming to enhance adaptability and competitiveness. Etzkowitz *et al.* <sup>[3]</sup> advocated for innovation in higher education by shaping entrepreneurial universities through experimental approaches and innovative proposals. Koutsouris *et al.* <sup>[4]</sup> analyzed the concept of the “ideal” higher education student and recommended institutional changes to align with this vision.

Li *et al.* <sup>[5]</sup> examined the development of an online management system for ideological and political education in colleges, focusing on improving its effectiveness and coverage. Aithal *et al.* <sup>[6]</sup> proposed a comprehensive student development and service provision model to promote holistic student growth. Additionally, scholars have increasingly emphasized the application of emerging technologies in education. For instance, Chen <sup>[7]</sup> investigated the potential educational applications of metaverse technology, while Resch *et al.* <sup>[8]</sup> employed service-learning methods to bridge the gap between teacher education theory and practice. Huang <sup>[9]</sup> emphasized the cultivation of core competencies for Chinese students through artificial intelligence-based education. Ling *et al.* <sup>[10]</sup> examined reforms in personality standards within the management systems of higher vocational education in China.

However, current research continues to face challenges, including inflexible collaboration models, mismatched teaching content with enterprise requirements, and a lack of practical platforms. These issues hinder the effectiveness of industry-university cooperation and limit the quality of talent cultivation.

## 3. Method

### 3.1. Application of industry-university cooperation

The application of industry-university cooperation serves as a crucial means to enhance the practical and innovative abilities of college students. Through such cooperation, schools and enterprises achieve resource-sharing and complementary advantages by jointly formulating talent training programs and conducting practical teaching activities. The basic framework of industry-university cooperation primarily includes university-enterprise collaboration and the integration of industry, university, and research <sup>[11,12]</sup>.

By fostering close collaboration among schools, research institutions, and enterprises, scientific research projects can be jointly undertaken, promoting the deep integration of technological innovation with industrial advancements. This collaboration contributes a continuous stream of innovative capabilities to the

comprehensive development of the socio-economic landscape.

The basic model of industry-university cooperation can be summarized as follows:

$$IC = \{S, IR\} \quad (1)$$

The primary framework includes university-enterprise collaboration and industry–university-research integration, where  $IC$  represents the industry-university cooperation model,  $S$  represents university-enterprise cooperation, and  $IR$  represents industry–university-research integration<sup>[13]</sup>.

To evaluate the outcomes of industry-university cooperation, this study employs a multi-factor functional relationship:

$$E = \{D, S, T, P\} \quad (2)$$

Here,  $E$  represents the effectiveness of cooperation,  $D$  denotes the depth of collaboration,  $S$  signifies students' practical abilities,  $T$  reflects students' innovative capabilities, and  $P$  includes evaluation indicators such as employment quality.

### 3.2. Practical teaching mode for college students

Under the background of industry-university cooperation, the reform and innovation of the practical teaching mode for college students have become imperative to enhance their practical and innovative abilities. The specific steps for implementing a practical teaching mode are outlined below:

- (1) Formulation of a practical teaching plan: The practical teaching plan serves as the starting point for practical teaching activities. It should clearly define the objectives, content, methods, schedule, location, and assessment standards in alignment with professional training objectives and curriculum requirements.
- (2) Preparation of practical teaching resources: Practical teaching resources, including teaching materials, experimental equipment, and venues, should be prepared in accordance with the practical teaching plan.
- (3) Implementation of practical teaching:
  - (a) Classroom practical teaching: Methods such as case analysis, group discussions, and scenario simulations are employed to provide students with opportunities to apply theoretical knowledge in a controlled environment.
  - (b) Campus practical teaching: Activities such as theme-based events, book exchanges, and online practice sessions are conducted on campus to deepen students' comprehension of theoretical concepts.
  - (c) Social practice teaching: Students are organized to participate in activities such as visits, social surveys, and work-study programs, enabling them to engage with society, enhance their sense of social responsibility, and gain real-world experience.
  - (d) Practical operations: During the practical operations phase, teachers first demonstrate the experimental procedures and explain relevant principles and precautions. Students are then divided into groups to carry out the experiments, with teachers providing guidance and addressing errors as necessary. Peer communication and collaborative problem-solving are encouraged during this phase.
- (4) Practice assessment and evaluation: Practical assessment involves two main components:
  - (a) Practice operation assessment: This evaluates students' practical skill levels.

- (b) Practice report assessment: This assesses students' ability to summarize and analyze their practical experiences.
- (5) Summary and reflection of practical teaching: Following the completion of practical teaching activities, teachers should organize sessions for students to summarize their experiences, share insights, and reflect on the practical learning process.

## 4. Results and discussion

### 4.1. Testing the effectiveness of practical teaching mode

- (1) Determination of test objectives and indicators: At the initial stage of evaluating the practical teaching mode, the primary task is to establish clear and specific testing objectives. These objectives focus on assessing students' practical skills, knowledge acquisition, and innovation abilities. To ensure accuracy and objectivity, quantitative indicators and evaluation standards must be defined. These indicators should reflect students' performance across various dimensions and be both operational and measurable. By establishing precise objectives and indicators, a strong foundation is laid for designing subsequent testing plans.
- (2) Design of the test plan: Based on the predetermined objectives, a comprehensive and feasible testing plan is developed. This plan provides detailed arrangements for key components, including testing content, methods, timing, and location.
  - (a) Content: The testing content combines the characteristics of practical teaching, incorporating assessments of practical skills, theoretical knowledge, and comprehensive application abilities.
  - (b) Methodology: Diverse methods such as practical demonstrations, written tests, and case analyses are employed to comprehensively evaluate students' capabilities.
  - (c) Scheduling: The testing schedule and location are planned systematically to ensure the smooth execution of the process.
- (3) Implementation of the test: Once the testing plan is finalized, the test is organized and conducted in strict accordance with the outlined procedures. Efforts are made to ensure a fair and secure testing environment, providing equal opportunities for all students. Detailed records of students' test performance, including answer scores and time management, are maintained for subsequent analysis. **Table 1** illustrates the experimental data.

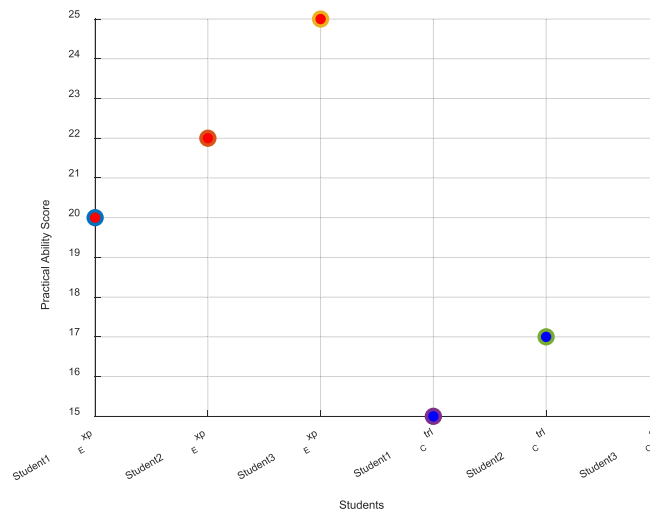
**Table 1.** Experimental data

Student number	Group	Answer score	Time management score
1	Control group	80	75
2	Control group	78	80
3	Control group	85	85
4	Experimental group	90	91
5	Experimental group	92	93
6	Experimental group	95	96

- (4) Data collection and analysis: Upon completion of the test, students' scores and feedback are promptly

collected. During the data analysis phase, statistical methods are employed to conduct in-depth exploration and detailed evaluation of the results. Comparing scores across different testing stages allows for a comprehensive assessment of the practical teaching mode's effectiveness, highlighting students' strengths and areas for improvement. The findings provide robust support for enhancing teaching practices. Additionally, the testing plan is continuously refined and optimized based on student feedback to ensure its effectiveness in future applications.

## 4.2. Practical ability

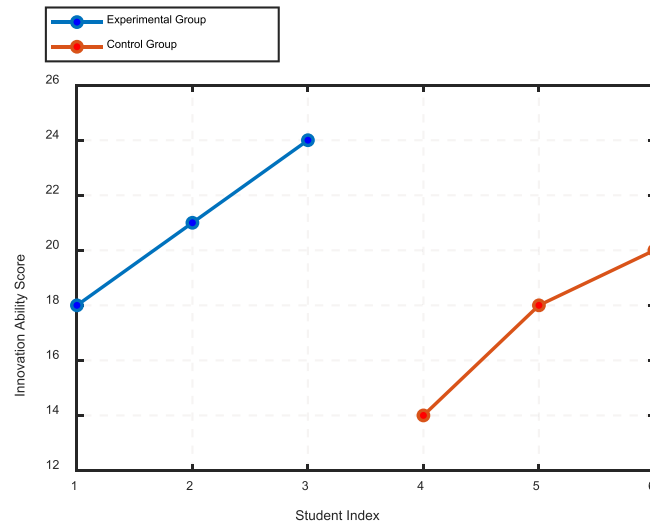


**Figure 1.** Comparison of practical ability

**Figure 1** illustrates a comparison of the practical ability levels of students in the experimental and control groups. The score range is set between 15 and 25, with higher scores indicating stronger practical abilities. Data from the experimental group reveals that the practical ability scores of the three students are 20, 22, and 25, respectively, all of which indicate a high level of practical ability. In contrast, the scores for the three students in the control group are 15, 17, and 19, respectively, which are significantly lower than those of the experimental group. Notably, the lowest score in the experimental group (20) is higher than the highest score in the control group (19), strongly demonstrating that the measures implemented under the experimental conditions significantly enhanced students' practical abilities.

Further analysis of the data reveals an upward trend in the practical ability scores within the experimental group, increasing progressively from 20 to 25 points. This trend highlights a gradient or variation in practical abilities among students in the experimental group, but all scores remain at a high level, considerably surpassing those of the control group. While the control group also exhibits an upward trend, the increase is relatively modest, ranging from 15 to 19 points. This limited improvement may be attributed to traditional teaching methods or the absence of targeted interventions.

### 4.3. Innovation capability



**Figure 2.** Comparison of innovation ability

**Figure 2** presents a comparison of the innovation ability scores of students in the experimental and control groups. The innovation ability scores for the experimental group are 18, 21, and 24, demonstrating a clear upward trend as the scores increase progressively from the first to the third student. These results suggest that the measures implemented for the experimental group have contributed to the gradual improvement of students' innovation abilities.

In comparison, the innovation ability scores of the control group are 14, 18, and 20, respectively. Although the scores show an increase, the overall improvement is less pronounced than that observed in the experimental group. From the first to the second student, the increase is minimal, while a larger increase is observed from the second to the third student. Despite this improvement, the scores of the control group students remain consistently lower than those of the experimental group, further emphasizing the effectiveness of the measures applied in the experimental conditions.

## 5. Conclusion

This study investigates the practical teaching mode for college students within the context of industry-university cooperation. A substantial amount of experimental data was collected through rigorous testing, followed by an in-depth analysis and discussion of the findings. The results demonstrate that the practical teaching mode under industry-university cooperation can significantly enhance students' practical and innovative abilities.

However, certain limitations and challenges persist, including a lack of flexibility and diversity in cooperation models, outdated teaching content, and insufficient practical platforms. Addressing these issues is essential for optimizing the effectiveness of the teaching mode.

Future research should consider broadening the scope of the study to include a wider range of participants. Additionally, incorporating more diverse research methods, such as empirical studies and case analyses, could provide further insights. These measures would contribute to the continuous improvement and deeper exploration of the research outcomes presented in this study.

## Disclosure statement

The author declares no conflict of interest.

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# Research on the Cultivation Path of Practical Ability of College Talents from the Perspective of Research Travel

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**Abstract:** Research travel represents an innovative educational model that integrates academic study with travel experiences. Its application in higher education effectively cultivates students' comprehensive practical abilities and promotes their holistic development. In practice, students transcend traditional classroom boundaries by engaging in field observations and research activities to explore industry developments and resources within their professional domains. This approach enriches professional knowledge while allowing students to experience the unique charm of various landscapes. This paper examines the pathways for cultivating practical abilities in university students through research travel, analyzes its significant value in talent development, and proposes specific strategies for implementation. The objective is to enhance students' practical abilities through research travel activities and provide novel insights and methods for talent cultivation in higher education.

**Keywords:** Research travel; University talents; Practical ability; Training path

**Online publication:** February 7, 2025

## 1. Introduction

The rapid societal advancement and deepening educational reforms have presented new challenges and opportunities for talent cultivation in higher education. Practical ability, as one of the core competencies required of modern talents, holds immense significance for enhancing students' comprehensive quality and competitiveness.

Research travel, an educational approach that integrates study with travel, broadens students' horizons and cultivates their practical abilities and sense of social responsibility through fieldwork and experiential learning. Wei *et al.* emphasized that identifying appropriate themes and objectives is essential for the effective implementation of research travel activities, as these elements underpin its educational value<sup>[1]</sup>. Similarly, Hou advocated for designing research travel courses with scientific objectives, differentiated content, and structured

activities to maximize educational outcomes <sup>[2]</sup>.

Internationally, research travel encompasses broader connotations, functioning not only as a learning methodology but also as a means of cultural exchange and life experience. This approach fosters students' global perspectives and cross-cultural communication skills. For example, Abubakar *et al.*'s study in Northern Cyprus highlighted the multifaceted value of postgraduate research travel, including enhanced employment prospects, improved educational quality, and individual development <sup>[3]</sup>. Similarly, Tashlai's interviews with international research travel students in five Eastern European countries identified diverse values, such as future income expectations and career choices, which collectively influence students' long-term development <sup>[4]</sup>.

Practical ability is a cornerstone of higher education talent cultivation, enabling students to apply theoretical knowledge to real-world contexts, solve practical problems, and demonstrate innovative thinking and teamwork skills. However, challenges persist, including a disconnection between theoretical instruction and practical application and a lack of adequate teaching resources, which hinder the development of students' practical abilities.

Addressing these challenges requires a reimagined approach to cultivating practical abilities that align with the demands of the modern era. Research travel offers a promising pathway, necessitating an in-depth exploration of its educational potential and innovative implementation models. Furthermore, it calls for practical solutions to existing challenges based on the core competencies required for talent cultivation in higher education. This exploration aims to advance educational reforms, enhance the quality of talent development, and promote the overall progress of higher education.

## **2. The important value of practical ability training of college talents from the perspective of research travel**

### **2.1. Contribution to the all-round development of students**

College education should aim to cultivate well-rounded talents, guiding students toward self-awareness while strengthening their practical abilities. By encouraging students to step out of the classroom and immerse themselves in nature, society, and historical and cultural contexts, research travel effectively broadens their knowledge horizons and promotes holistic development, including both physical and mental well-being. Team cooperation and interaction during research travel activities help to develop students' social communication skills and teamwork spirit, enabling them to apply knowledge to real-world problems and enhance their critical thinking and practical skills. When facing unfamiliar environments and challenges, students gain opportunities to think independently, manage themselves, and foster self-motivation, ultimately improving their overall quality. Initiatives such as the "Sound in Mind" project can reinforce students' ideological beliefs and values, enhance their aesthetic qualities and creativity, and inspire their intrinsic motivation to achieve comprehensive development, facilitating balanced and coordinated growth through proactive efforts <sup>[5]</sup>.

### **2.2. Facilitation of talent cultivation for the new era**

The demand for talent in the modern era places greater emphasis on practical ability, innovation, and comprehensive quality. Research travel, by offering diverse practical opportunities and scenarios, enables students to discover, analyze, and solve problems, thereby nurturing their innovation awareness and practical skills. Given the highly practical nature of many academic disciplines, traditional classroom teaching often fails to meet students' developmental needs. Research travel supplements this gap by providing access to varied

off-campus resources, such as practice bases and natural landscapes, encouraging students to engage directly with production and service sectors. By experiencing the outcomes of modern-era advancements, such as rural revitalization projects, students cultivate a sense of social responsibility and align their personal development with societal needs. Research travel also emphasizes fostering a sense of civic awareness, global vision, and patriotism, aiming to produce talents who embody innovation, international perspective, and a commitment to national development.

### **2.3. Promotion of university teaching reform**

As an innovative educational approach, research travel transcends the limitations of traditional classroom teaching. Colleges and universities can adopt more flexible curriculum systems and teaching content, emphasizing the integration of theoretical knowledge with practical application and uniting knowledge dissemination with value guidance. For modern college students, traditional teaching methods no longer satisfy their needs; they show a preference for approaches such as extracurricular practice and scenario simulation. Research travel supports the adoption of updated teaching methodologies, such as project-based learning, making instruction more engaging, dynamic, and effective. This enhances students' interest and participation in learning, contributing to improved teaching quality and fostering innovation in talent cultivation models.

## **3. Research on the cultivation path of college talents' practical ability from the perspective of research travel**

### **3.1. Effective integration into the talent training system and development of unique research travel courses**

Colleges and universities play a crucial role in cultivating talent, and the design of curriculum systems and content directly impacts students' comprehensive literacy and adaptability. In teaching practice, it is essential to integrate research travel into the talent training system as an integral part of practical education. Higher education institutions should prioritize and support research travel within their strategic framework and develop specialized courses tailored to their professional strengths and regional characteristics. These efforts aim to extend traditional classroom teaching and enhance students' practical abilities.

From the perspective of research travel, colleges and universities should consider the specific needs and characteristics of various disciplines to customize relevant travel plans. For instance, students majoring in environmental science could benefit from visiting ecological protection areas such as nature reserves, ecological parks, and sewage treatment facilities. These activities provide opportunities for field observation, data collection, and hands-on experience, allowing students to understand ecosystem composition, structure, and functions, as well as the causes, impacts, and mitigation strategies for environmental pollution. Participation in ecological protection projects equips students with practical skills in applying ecological protection measures and technical solutions.

After completing the research travel activities, students can be required to submit ecological research reports or participate in the planning of ecological protection projects to demonstrate their learning outcomes and practical skills. These immersive experiences not only spark students' interest and motivation but also help them refine their practical abilities, laying a solid foundation for their future career development.

### **3.2. Emphasis on production experience development and research to promote the integration of production and teaching**

To enhance the practical outcomes of research travel, colleges and universities should focus on the development of production experience and research initiatives. Promoting the integration of production and teaching within research travel fosters the seamless connection between theoretical knowledge and practical application, ultimately enhancing students' practical and innovative abilities.

First, it is essential to design experience-oriented and research-driven travel products. In research travel, college students often prioritize experiential learning and investigative activities. Institutions should balance students' needs with the professional characteristics of their disciplines to develop tailored travel products. For example, tourism students could engage in projects that explore tourism resources and ecological conservation efforts in historically significant regions. Activities might include investigating unique flora and fauna or studying social issues in rural development areas. Such programs can provide students with both patriotism education and insights into agricultural appreciation, while also encouraging field investigations, problem-solving, and solution proposals.

Second, schools should actively promote the integration of production and teaching through strategic collaborations. Partnerships with research activity centers, travel service agencies, and other enterprises can facilitate the joint development of research travel plans. These collaborations enable students to engage in simplified production environments or participate directly in product research, development, and design during research courses. Such initiatives cultivate practical and innovative skills while fostering resource-sharing and complementary advantages across institutions and industries.

### **3.3. Increasing investment and support for research travel to create a comprehensive and multidimensional research experience**

To fully realize the application value of the research travel model, universities should increase investments and support, optimize resource allocation, foster cooperation and exchanges, and create a comprehensive and multi-dimensional research experience.

Firstly, the allocation of research travel resources should be optimized. Universities must allocate adequate capital, human resources, and materials to ensure that students can engage in research activities under favorable conditions. For instance, establishing dedicated funds for research travel can support expenses related to travel, research materials, and organizational needs. Strengthening the professional quality and teaching capacity of research travel instructors is also essential to ensure high-quality guidance during these activities.

Secondly, universities should establish research resource-sharing platforms both internally and externally. By collaborating with government agencies, enterprises, and social organizations, universities can build platforms to facilitate resource sharing and complementarity. This approach promotes effective resource integration, enriches the content and formats of research travel, and enhances students' experiences.

Finally, cooperation and exchange between institutions should be reinforced. Universities should leverage the resource advantages of various stakeholders, fostering deeper integration with society to improve students' research experiences. Examples include partnerships with tourism administrations and environmental protection bureaus for additional research resources, collaboration with enterprises and research institutions to provide internships and practical opportunities, and engagement with non-profit organizations to organize diverse research and social practice activities<sup>[5]</sup>.

### **3.4. Establishing an evaluation system for research travel and formulating detailed evaluation standards**

A comprehensive evaluation system is crucial for ensuring the effectiveness and relevance of practical ability training for college students. Universities should develop a scientific and thorough evaluation system for research travel, with well-defined objectives and detailed standards. This system should comprehensively assess student performance, support teaching improvements, and promote student growth.

To enhance professionalism and objectivity, universities may invite experts, scholars, or industry practitioners to act as evaluation consultants. These consultants can conduct in-depth assessments of students' practical abilities and innovative thinking, providing targeted guidance and feedback.

For example, in the evaluation of agricultural research travel, universities should refine specific evaluation criteria. These include:

- (1) Knowledge acquisition: Assessing whether students have grasped fundamental agricultural concepts, such as crop growth cycles, pest control methods, and soil management, through field visits and practical activities.
- (2) Practical operation ability: Evaluating students' proficiency in tasks like using agricultural tools, planting crops, and controlling pests and diseases, as well as their ability to apply theoretical knowledge to solve real-world problems.
- (3) Innovative thinking abilities: Examining whether students can identify problems during practice, analyze these issues, and propose creative solutions, such as new agricultural techniques or improvements to existing methods.
- (4) Logical and written expression: Reviewing students' practice reports, team discussion records, and other outputs to assess their capacity to integrate theoretical knowledge with practical experience, conduct critical analysis, and articulate their findings clearly and coherently.

Additionally, the evaluation process should emphasize summarizing teaching outcomes. Teachers should focus on assessing students' ability to analyze and synthesize information, draw meaningful conclusions, and present their insights effectively. This ensures that research travel not only enhances students' practical and innovative skills but also contributes to their overall academic and professional development.

## **4. Conclusion**

In conclusion, with the rapid advancement of the knowledge economy and the acceleration of globalization, colleges and universities, as pivotal institutions for talent cultivation, face unprecedented challenges and opportunities. Research travel, as an innovative educational model that integrates school-based learning with off-campus comprehensive practice, provides a new pathway for cultivating the practical abilities of college students.

The research travel teaching model, which emphasizes hands-on activities and personal experiences, encourages students to actively explore and learn in real-world environments, thereby enhancing their practical skills. In its implementation, schools should focus on effectively incorporating research travel into the talent training system, prioritizing product experience development and research, increasing investment and support, and establishing robust evaluation systems. These measures are critical for leveraging the unique advantages of research travel in enhancing students' practical abilities and fostering their holistic development.

During the process of educational reform, universities should devote greater attention and resources to

research travel, continuously innovating and improving its content and methodologies. This commitment will contribute to the cultivation of a new generation of talents equipped with practical abilities and innovative mindsets, aligning with the demands of the modern era.

## Disclosure statement

The author declares no conflict of interest.

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# Research on the Application of Traditional Chinese Culture Picture Books in Kindergarten Education

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**Abstract:** Traditional culture is a valuable legacy shaped over thousands of years by the development of the Chinese nation. It encompasses not only rich historical knowledge but also profound ideological, moral, and humanistic elements. Integrating Chinese traditional culture picture books into early childhood education can effectively stimulate children's interest, mobilize their enthusiasm and initiative, and enable them to learn and appreciate the richness of Chinese traditional culture. This approach promotes the development of cultural self-confidence and pride in young learners, thereby laying the foundation for their comprehensive development. This paper provides a brief analysis of the application of Chinese traditional culture picture books in kindergarten education, aiming to offer valuable insights for readers.

**Keywords:** Chinese traditional culture; Picture books; Kindergarten education

**Online publication:** February 7, 2025

## 1. Introduction

The report to the 19th National Congress of the Communist Party of China emphasized the importance of “strengthening cultural self-confidence and promoting the prosperity and development of socialist culture.” Similarly, the report to the 20th National Congress reiterated the need to “fully implement the Party’s educational principles and policies, fulfill the fundamental task of cultivating morality and fostering people, and focus on nurturing socialist builders and successors with well-rounded development in morality, intelligence, physical health, and aesthetics.” These directives reflect the Party and the state’s prioritization of cultural development, particularly in the education of teenagers and children.

Picture books, often referred to as illustrated storybooks, convey stories and impart knowledge to children through a combination of text and imagery. Their concise, intuitive, and engaging content makes them particularly suitable for young learners. The integration of Chinese traditional culture into picture books

enriches their content, effectively stimulates children's interest, encourages active participation in reading and learning, and fosters an understanding of Chinese folk culture. This approach helps children establish self-confidence and pride in their national culture, laying a robust foundation for their future development.

In this context, kindergartens and preschool educators in the new era should integrate Chinese culture picture books into early childhood education. By designing and conducting teaching activities centered on these picture books through diverse methods and strategies, educators can enhance children's understanding and recognition of traditional culture, thereby supporting their long-term learning and development.

## **2. Analysis of the significance of using traditional Chinese culture picture books in early childhood education**

Early childhood is the foundational stage of individual growth and a critical period for cultivating interests and developing positive habits. Integrating Chinese culture picture books into early childhood education holds substantial practical significance for children's future learning and healthy development. This section analyzes the benefits of this approach in several aspects.

- (1) Promoting understanding of traditional culture and building cultural confidence: The application of Chinese traditional culture picture books in early education allows children to experience the profound connotations of traditional culture, strengthening their understanding and fostering cultural inheritance. This process promotes the development of cultural self-confidence and pride. For example, teachers may introduce the picture book *These Are the 24 Solar Terms*, which details the 24 solar terms in a village along the Yellow River, including meteorological changes, astronomical phenomena, and cultural traditions. This approach enables children to gain natural science knowledge while appreciating ancestral wisdom, thereby encouraging the preservation and promotion of traditional culture.
- (2) Strengthening moral values and shaping character: Early childhood is a crucial stage for forming cognition, emotion, and behavior. Integrating traditional culture picture books into education can instill virtues and moral values, gradually shaping children's character and laying the foundation for healthy growth. For instance, teachers can share picture books like *Three-Character Classic* and *Disciple Rules*, which incorporate values such as honesty, diligence, and filial piety. By engaging with these materials through texts and illustrations, children absorb moral lessons effortlessly. Another example is *Chinese Food on the Plate*, which introduces the agricultural culture of Yuanyang terraces in Yunnan Province. This book teaches children about sustainable practices and good habits while stimulating their interest and enthusiasm for learning.
- (3) Cultivating language skills and logical thinking: The *Guide to the Learning and Development of Children Aged 3–6* emphasizes that early childhood is a pivotal stage for language development. Literature-based picture books, such as those featuring traditional poems and nursery rhymes, enrich children's vocabulary, enhance their language skills, and foster their expression abilities. For example, sharing *Three Hundred Poems of the Tang Dynasty* can help children understand poetic knowledge, appreciate artistic expression, and improve their comprehension and communication skills. Additionally, books like *Idiom Stories* can train children's imagination and logical thinking by presenting vivid idiom stories, allowing them to grasp idiomatic meanings while enhancing their cognitive development.

- (4) Enriching aesthetic experience and enhancing appreciation: Early childhood represents the embryonic stage of aesthetics and a critical period for aesthetic education. This education aims to develop children's ability to perceive, appreciate, and create beauty. Traditional culture picture books often feature rich artistic elements, such as calligraphy, embroidery, paper cutting, and painting. Incorporating these books into early education provides children with a diverse aesthetic experience, helping them appreciate traditional culture and develop artistic abilities. For instance, picture books like *Chinese Folk Stories* present folk narratives alongside visual art, allowing children to explore the charm of Chinese folk art and cultivate their appreciation and aesthetic skills effectively.

### **3. Challenges in the integration of traditional Chinese culture picture books into early childhood education**

Integrating traditional Chinese culture picture books into early childhood education holds significant practical value for children's healthy growth and learning development. Currently, many early childhood education institutions and teachers actively embrace the integration of these picture books into their curricula to enhance the quality and effectiveness of early childhood education. However, practical investigations reveal several challenges in this process, which are analyzed below.

First, some preschool teachers lack a deep understanding of traditional cultural picture books. Teachers, as key organizers and participants in educational activities, play a pivotal role in facilitating effective learning. However, certain preschool teachers have insufficient knowledge of traditional culture and limited experience in picture book pedagogy. This deficiency not only hampers the effectiveness of picture book teaching but also prevents the full educational potential of traditional Chinese culture picture books from being realized. It is, therefore, essential to strengthen the professional development of preschool teachers and enhance their expertise and overall competence.

Second, there is insufficient attention and support from parents regarding traditional Chinese culture picture book education. Many parents prioritize exposing their children to modern culture and show little interest in traditional cultural picture books. To address this, kindergartens and teachers should engage in meaningful communication and collaboration with parents, raising awareness about the educational value of traditional Chinese culture picture books. This approach can help shift parents' perceptions and foster their recognition and support.

Finally, teaching methods and models are relatively simplistic. While kindergartens and preschool teachers acknowledge the importance of traditional cultural picture books and integrate them into their teaching practices, the approaches they use are often monotonous. This lack of variety limits children's engagement and fails to fully stimulate their enthusiasm and initiative, thereby affecting the overall effectiveness of classroom teaching.

In conclusion, although kindergartens and teachers have recognized the value of traditional Chinese culture picture books and made efforts to incorporate them into early childhood education, several challenges persist. Addressing these issues requires targeted countermeasures, which are proposed in subsequent sections.

## **4. Innovative application strategies for traditional Chinese culture picture books in early childhood education**

### **4.1. Strengthening teacher development**

Preschool teachers play a critical role in early childhood education. To better integrate traditional Chinese culture picture books into early education and maximize their educational potential, kindergartens must prioritize teacher development. Enhancing teachers' understanding of these picture books and improving their teaching skills are essential steps in fostering children's healthy growth.

Kindergartens should regularly organize relevant training programs to update teachers' pedagogical concepts and improve their proficiency in teaching with picture books. Additionally, organizing exchange activities, such as teaching seminars and academic conferences, can facilitate the sharing of advanced teaching methods and strategies, thereby continuously enhancing teachers' professional expertise and comprehensive capabilities.

Furthermore, kindergartens should establish and refine incentive mechanisms to recognize and reward teachers who excel in teaching traditional Chinese culture picture books. Such measures can stimulate teachers' enthusiasm and initiative, encouraging them to innovate and explore new teaching models, thereby laying a foundation for the holistic development of children.

### **4.2. Enhancing the availability of traditional Chinese culture picture books**

To improve the educational effectiveness of traditional Chinese culture picture books, increasing their availability is crucial. Greater access to these resources allows children to engage more frequently with the material, absorb the essence of traditional culture, and cultivate strong moral character, ultimately supporting their comprehensive development.

First, kindergartens should acquire a wide range of high-quality traditional Chinese culture picture books through various channels, ensuring children have ample opportunities to explore these resources. Second, kindergartens can establish dedicated spaces, such as traditional culture picture book reading rooms and book corners, to create an environment conducive to reading and engaging with these books.

Finally, fostering collaboration with parents is essential for maximizing the impact of traditional Chinese culture picture books. It is insufficient for kindergartens alone to bear the responsibility of this educational initiative. Teachers and kindergartens should establish stable communication channels with parents, actively promoting the value of traditional Chinese culture picture books and guiding parents to appreciate their significance. Through a home-school co-education model, parents and educators can jointly encourage children to explore these books, subtly instill correct values and concepts, and build a solid foundation for inheriting and promoting traditional culture.

### **4.3. Organizing and conducting various types of activities**

To better integrate traditional Chinese culture picture books into early childhood education, kindergartens and teachers should actively organize and implement various types of activities that encourage children to learn and understand the content of picture books, thereby promoting their holistic development. Specifically, preschool teachers can utilize traditional picture books to conduct life-based activities that help children develop positive habits.

For instance, during meal-related activities, teachers can guide children to read picture books such as *Fun Pie*, *Chinese Food*, and *Soft Tofu*, enabling them to learn about different types of food, enhance their

understanding, and develop healthy living habits. Additionally, teachers can organize parent-child activities to deepen the integration of traditional culture into early education. For example, they may select engaging excerpts from *Journey to the West* and arrange role-playing activities for parents and children during such events. This approach not only strengthens the emotional bond between parents and children but also stimulates children's interest in reading, cultivates their literacy and appreciation skills, and enhances their comprehensive abilities. These activities contribute significantly to their future development.

#### **4.4. Conducting effective evaluation of children's picture book reading**

Evaluation is a critical component of early childhood education. To maximize the educational value of traditional cultural picture books, preschool teachers should emphasize the assessment of children's reading, creating a solid foundation for their comprehensive development.

First, kindergarten teachers should establish reasonable evaluation criteria, encompassing aspects such as comprehension, reading, and expression abilities, to ensure the accuracy of assessment outcomes. Second, teachers should adopt diversified evaluation methods, including teacher evaluations, parent feedback, and children's self-assessments, to obtain a comprehensive understanding of the children's reading progress. Based on these evaluations, teachers can adjust and optimize their teaching strategies to enhance the overall effectiveness of traditional cultural picture book instruction.

### **5. Conclusion**

In conclusion, integrating traditional Chinese culture picture books into early childhood education holds significant practical importance in the current era. Kindergartens and preschool teachers must acknowledge the critical value of these resources and actively work to innovate picture book teaching through diverse strategies and approaches. Alongside assisting children in learning and understanding the content of these picture books, educators should aim to instill correct values and foster the development of commendable character traits. These efforts will provide a robust foundation for children's future academic pursuits and personal growth.

### **Disclosure statement**

The author declares no conflict of interest.

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**Publisher's note**

Bio-Byword Scientific Publishing remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

# Blended Teaching Model in University Computer Information Technology Education: Application and Strategies

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**Abstract:** With the rapid development of information technology, higher education has undergone significant transformation. As an essential component of higher education, university-level computer information technology teaching faces unprecedented opportunities and challenges. Traditional teaching methods have become inadequate in addressing the modern demand for computer professionals. In this context, the blended teaching model, which integrates the advantages of both online and offline teaching, has emerged as a prominent topic of research in the field of education. This paper explores the application of the blended teaching model in university computer information technology education by analyzing its definition, characteristics, and significance. Furthermore, innovative strategies for implementing the blended teaching model are proposed to enhance teaching effectiveness.

**Keywords:** University; Computer information technology teaching; Blended teaching model

**Online publication:** February 7, 2025

## 1. Introduction

As an innovative educational approach combining online and offline teaching, the blended teaching model has become a focal point in education reform <sup>[1]</sup>. This model not only overcomes the constraints of time and space but also leverages modern information technology to offer more flexible and diverse learning methods. It stimulates students' interest in self-directed learning and fosters effective interaction and collaboration between teachers and students <sup>[2]</sup>. This paper examines the application of the blended teaching model in university computer information technology education and proposes innovative strategies to support the reform and advancement of education in this field.

## **2. Overview of blended teaching model**

### **2.1. Definition**

The blended teaching model is a modern teaching approach that effectively combines traditional classroom teaching with online teaching supported by advanced information technology to maximize educational objectives and enhance teaching efficiency<sup>[3,4]</sup>. This model not only addresses the limitations of traditional teaching methods but also leverages the advantages of technology to provide students with a more flexible, efficient, and diverse learning environment.

### **2.2. Characteristics**

- (1) Flexibility: The blended teaching model is highly flexible, overcoming the constraints of traditional teaching in terms of time and space<sup>[5]</sup>. Students are no longer confined to fixed classrooms or specific schedules. They can access learning resources and complete assignments anytime and anywhere through online platforms and mobile devices. This flexibility significantly enhances the autonomy and convenience of learning.
- (2) Personalized learning: In the blended teaching model, students experience a more personalized learning journey. Teachers can design tailored teaching programs and activities according to students' interests, abilities, and needs, providing targeted teaching support<sup>[6]</sup>. Students, in turn, can select appropriate learning resources and methods based on their individual circumstances, enabling effective self-management and development.
- (3) Collaborative learning: This teaching model emphasizes collaboration among students. Online platforms facilitate group discussions, cooperative learning, and practical activities, fostering teamwork, communication, and innovation skills. Teachers can also interact with students in real time through these platforms, offering timely guidance and feedback to promote effective teacher-student communication<sup>[7]</sup>.
- (4) Resource richness: The blended teaching model utilizes modern information technology to enrich and diversify teaching resources<sup>[8]</sup>. Students can access a wide range of materials, including videos, audio recordings, text, and images. These resources not only deepen students' understanding of knowledge but also enhance their interest and enthusiasm for learning.
- (5) Teaching effect evaluation and feedback: The blended teaching model places significant emphasis on evaluating and providing feedback on teaching outcomes. Online platforms allow teachers to collect learning data, monitor students' progress, and evaluate their performance in real time. Teachers can offer timely suggestions and feedback, aiding students in adjusting their learning strategies and helping educators improve their teaching methods.

## **3. The significance of integrating the blended teaching model in university computer information technology education**

### **3.1. Improving the teaching level of computer majors in universities**

The introduction of the blended teaching model holds substantial significance for enhancing the teaching quality of computer science programs in universities. By seamlessly integrating online and offline teaching, the teaching process is no longer constrained by traditional classroom methods but becomes more flexible and diverse. Under this approach, educators can utilize online platforms to disseminate computer course materials,

enabling students to thoroughly review and prepare before class, thereby establishing a foundation for deeper in-class learning. During classroom sessions, teachers can emphasize hands-on practice and interactive activities, significantly increasing the efficiency of computer-related instruction.

Moreover, the blended teaching model fosters students' independent learning abilities <sup>[9]</sup>. Through online teaching platforms, students can tailor their learning by selecting content and methods that align with their individual progress and interests. This flexibility accommodates diverse learning needs, encouraging greater enthusiasm and engagement among students. Additionally, the availability of high-quality teaching resources on online platforms eliminates resource redundancy and enhances their utilization efficiency. Educators can leverage these platforms' tools to diversify content delivery, innovate teaching methods, and improve instructional quality.

### **3.2. Enriching the professional competence of university computer teachers**

The implementation of the blended teaching model places higher demands on the professional skills of university computer science educators. Teachers are required to master the operation of various online teaching platforms, along with the associated software and tools used for computer education. This necessitates continuous professional development, including updating their knowledge base and adopting innovative teaching techniques to meet the demands of the digital era <sup>[10]</sup>.

Additionally, the blended teaching model offers an open communication platform for educators. Teachers can use online forums to collaborate, share teaching experiences, address challenges, and exchange resources. This collaborative approach not only broadens teachers' perspectives but also fosters mutual learning, thereby enhancing their professional expertise.

### **3.3. Promoting the comprehensive development of students**

In terms of knowledge acquisition, the blended teaching model provides abundant online resources, addressing the diverse learning needs of students. This approach stimulates interest in autonomous learning and aids in building a comprehensive knowledge framework. Furthermore, teachers can use online platforms to share cutting-edge research and encourage exploratory learning, fostering students' lifelong learning habits.

From a teamwork perspective, the blended teaching model supports collaborative learning through tools such as group discussions, collaborative editing, and project management available on online platforms. These resources facilitate effective teamwork among students.

Regarding innovation, the blended teaching model inspires students to develop creative thinking. By combining online and offline learning, students gain access to diverse educational resources and practical opportunities, which foster innovative thinking. This multidimensional approach to innovation equips students with the skills required to maintain competitiveness in their professional careers and supports the holistic development of their capabilities.

## **4. Innovative strategies for university computer information technology teaching based on the blended teaching model**

### **4.1. Integrating teaching content and optimizing teaching methods**

In the blended teaching model, the integration and optimization of teaching content for university computer information technology are essential <sup>[11]</sup>. This requires educators to combine online and offline resources

systematically, ensuring the effective transmission of theoretical knowledge while emphasizing practical skills development. Teaching strategies should be flexibly adjusted according to student's abilities and needs to maximize learning outcomes.

Firstly, online and offline teaching should be seamlessly integrated. Online platforms can focus on delivering theoretical knowledge, while offline sessions emphasize hands-on practice and problem-solving. This combination allows students to build a strong theoretical foundation while reinforcing their understanding through practical application. Secondly, teachers should adopt the role of facilitators rather than simply acting as providers of knowledge. Utilizing tools such as learning management systems (LMS) and online discussion boards, educators can engage with students, monitor their progress, and provide personalized guidance.

Furthermore, the cultivation of students' self-learning abilities is crucial. In the blended teaching model, students are required to possess a certain level of independent learning capability. Teachers should foster this by promoting self-directed learning habits and instructing students on the effective use of online resources. For example, guiding students in utilizing MOOCs for autonomous learning and designing tasks that encourage independent exploration can enhance their self-directed learning skills.

#### **4.2. Leveraging online advantages and building a teaching resource database**

Maximizing the advantages of online resources is integral to the blended teaching model. Schools should integrate high-quality teaching materials from both domestic and international sources, such as open courses from prestigious universities and up-to-date research reports from professional organizations <sup>[12]</sup>. Educators should also be encouraged to create course-specific teaching materials based on their experiences.

Additionally, implementing a resource review mechanism is vital to ensure the accuracy and relevance of teaching materials. This can be achieved by forming a professional review team to evaluate, classify, and validate resources. Intelligent management systems should also be employed to enhance resource management. For instance, recommendation algorithms can be used to provide personalized learning resources tailored to students' learning records and interests, thereby improving learning efficiency.

Lastly, collecting student feedback on teaching resources and continuously optimizing the resource database is necessary. Feedback mechanisms such as regular student forums, online surveys, and user reviews can help improve the quality and structure of the resource library. By fully utilizing online resources, institutions can create a rich learning environment that promotes self-directed learning and supports students' lifelong educational journeys.

#### **4.3. Improving the evaluation system to promote comprehensive development**

In university computer information technology teaching, refining the evaluation system is a critical step toward fostering the comprehensive development of students. Teachers should closely monitor students' performance throughout the learning process, including their activities on online learning platforms, participation in class discussions, quality of homework, and contributions to group activities. This approach enables a comprehensive assessment of students' learning states, allowing educators to identify challenges and provide targeted guidance. For instance, for students exhibiting weaker performance in group collaboration, teachers can foster teamwork skills by adjusting role assignments and organizing team-building activities.

Moreover, the evaluation system should include a variety of assessment components. While final exam scores remain essential, additional indicators such as project outcomes, portfolios, and other measurable

achievements can better reflect students' comprehensive abilities in computer knowledge, technical skills, and innovation <sup>[13]</sup>.

Diversification of evaluators is equally important. Evaluation should not solely depend on teachers but should also include student self-evaluation and peer evaluation. Self-evaluation encourages students to reflect on their learning processes, recognize strengths and weaknesses, and create realistic improvement plans. Peer evaluation fosters communication and collaboration among students, enhancing teamwork skills. To ensure fairness and objectivity in self-evaluation and peer evaluation, clear criteria should be established and communicated by teachers <sup>[14]</sup>.

#### **4.4. Promoting school-enterprise cooperation and strengthening teaching practices**

Promoting school-enterprise cooperation is a vital strategy for strengthening practical teaching in computer information technology education. Establishing a school-enterprise collaboration platform facilitates resource sharing and enriches students' learning experiences. Partnerships with IT enterprises, such as joint laboratories and research and development centers, provide students with access to cutting-edge technology, equipment, and real-world application scenarios. This collaboration also fosters stronger ties between academic institutions and industries, preparing students for employment and entrepreneurship opportunities.

Introducing an enterprise mentorship system is another effective measure. Universities can invite technical experts from enterprises to serve as part-time instructors. These mentors, with their extensive practical experience and industry insights, can offer students specialized guidance in computer studies and share updates on the latest industry trends and technological advancements. Additionally, enterprise mentors can collaborate with faculty in designing curricula, ensuring alignment with the market's practical needs.

Practical training projects are crucial for enhancing students' hands-on skills. Universities should actively engage with enterprises to secure internship opportunities for students. Through real-world work environments and project assignments, students can develop their professional expertise, teamwork abilities, and problem-solving skills, thereby improving their competitiveness in the job market <sup>[15]</sup>.

### **5. Conclusion**

In summary, the blended teaching model offers significant advantages in enhancing the quality of university computer information technology education. It contributes to improving teaching standards, enriching the professional development of educators, and fostering the holistic growth of students. By integrating and optimizing teaching methods, establishing comprehensive resource repositories, refining evaluation systems, and promoting collaboration between academic institutions and enterprises, the effectiveness of the blended teaching model in computer information technology education can be substantially enhanced. These efforts collectively aim to achieve higher-quality education and cultivate well-rounded, skilled professionals who can meet the demands of enterprises and industries in the computer information technology sector.

### **Disclosure statement**

The author declares no conflict of interest.

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# Research on Reform of Clothing Design and Craft Teaching Based on Modern Apprenticeship System

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**Abstract:** Clothing design and craft is a professional and practical course. Teaching reform based on the modern apprenticeship system aligns with contemporary demands and effectively enhances students' professional skills and overall competencies, thereby increasing their competitiveness in the job market. This paper explores discussions on the modern apprenticeship system and the current teaching status of clothing design and craft, followed by an analysis of strategies for teaching reform in this field under the modern apprenticeship system.

**Keywords:** Modern apprenticeship; Clothing design and craft; Teaching reform

**Online publication:** February 7, 2025

## 1. Introduction

With the rapid development of the social economy, the teaching of fashion design faces numerous opportunities and challenges. Traditional teaching models no longer meet the learning needs of contemporary students. In this context, the modern apprenticeship system emerges as a talent cultivation model that integrates academic instruction with enterprise-based practice. Its application in the teaching of fashion design and craft enables students to adapt more effectively to the fashion industry's environment, comprehend actual design and production processes, improve their overall competencies, and establish a solid foundation for their future careers.

## 2. Overview of the reform of modern apprenticeship and clothing design and craft teaching

### 2.1. The basic concept and characteristics of modern apprenticeship

Modern apprenticeship is a contemporary talent training model that combines modern vocational education with the traditional mentoring system. By strengthening school-enterprise cooperation and integrating

industry with education, this model enhances the relevance and quality of vocational talent training, ensuring a seamless connection between professional education and industrial demand, as well as a close alignment between teaching content and job requirements <sup>[1]</sup>. In practical application, vocational colleges collaborate extensively with enterprises to allow students, as “apprentices,” to apply their professional knowledge and skills during internship stages. This process helps students clarify their career and employment goals, achieving the development objective of combining work and study. Additionally, the modern apprenticeship system breaks away from the traditional separation of vocational education and work practice, embodying the employment-oriented trend of vocational education reform. By learning professional skills under the guidance of a “master” during practice, students accumulate work experience, fostering the integration of school and enterprise education.

## **2.2. The necessity of reform in clothing design and craft teaching**

With the rapid development of society and the economy, traditional concepts in fashion design have become insufficient to meet the diverse and personalized needs of consumers. The demand for high-quality professionals in the fashion design and craft industry has also increased significantly. Against this backdrop, higher vocational colleges must actively explore reforms in clothing design and craft teaching to adapt to evolving market demands and cultivate more outstanding talent aligned with industry developments <sup>[2]</sup>. Furthermore, certain higher vocational institutions overly emphasize theory while neglecting practical application in the teaching of fashion design and craft. This imbalance weakens students’ practical abilities and innovation awareness. Teachers must address this issue by reforming traditional teaching approaches and innovating teaching content, methods, and evaluation systems. By adopting modern apprenticeship models and other production-education integration methods, students can gain broader professional insights, enhance their competitiveness in the job market, and establish a solid foundation for their career paths.

## **2.3. The application advantages of modern apprenticeship in clothing design and craft teaching**

Clothing design and craft teaching focuses on cultivating students’ professional practical abilities, while modern apprenticeship emphasizes enhancing practical skills alongside professional competencies and qualities. This model allows students to integrate theoretical knowledge with practical operations in real-world contexts, enabling them to address practical problems effectively <sup>[3]</sup>. Moreover, “learning by application” is a core concept of modern apprenticeship. Under the guidance of a “master,” students participate in real projects, completing authentic clothing design and production tasks. This exposure to cutting-edge technologies and fashion industry trends provides valuable insights into their future studies and careers. Additionally, during the clothing design and production process, with guidance from both school and enterprise mentors, students actively consider factors such as production costs, user experience, and market demand. This comprehensive approach contributes positively to the overall enhancement of students’ competencies.

# **3. The current situation of fashion design and craft teaching based on the modern apprenticeship system**

## **3.1. The mechanism of cooperation between schools and enterprises needs improvement**

Currently, the collaboration and interaction between some higher vocational colleges and garment enterprises

remain relatively superficial, lacking depth in areas such as curriculum design, talent training objectives, and the sharing of educational resources. This limitation prevents both parties from fully leveraging their strengths to cultivate high-quality vocational talents in garment design and craft skills<sup>[4]</sup>. In practice, school-enterprise cooperation often involves enterprises providing internship positions while schools organize senior students to participate in these internships. While this approach increases students' exposure to professional practice, it fails to adequately address their long-term career development and does not fully stimulate their initiative or creativity. Furthermore, due to the absence of effective supervision and evaluation mechanisms, students gain only limited knowledge and skill growth during their internships.

### **3.2. The goal of talent training needs optimization**

In the teaching of fashion design and craft, traditional training objectives often prioritize the transmission of theoretical knowledge while neglecting the cultivation of students' innovative thinking and practical abilities. However, the garment industry is highly competitive, and creative practical exploration serves as the core driver for its sustainable development. Therefore, talent training goals should place greater emphasis on fostering students' innovative thinking and practical problem-solving abilities<sup>[5]</sup>. Additionally, with the digital transformation and upgrading of the garment industry in the Internet era, vocational colleges should adapt their training objectives to include the development of students' digital design thinking and 3D printing application skills. Such adjustments will provide students with the necessary guidance and support for their long-term career development.

### **3.3. The strength of “double-qualified” teachers is relatively weak**

The rapid development of the garment industry, marked by the emergence of new technologies, materials, and techniques, demands that teachers not only possess a strong professional foundation and teaching ability but also have practical work experience. However, the number of teachers who can meet both of these requirements is limited, leaving significant room for improvement in the development of “double-qualified” teachers<sup>[6]</sup>. Currently, the teaching staff for garment design and craft in higher vocational colleges often exhibit a single-dimensional structure, lacking sufficient industry experience. Although these teachers typically have excellent professional backgrounds and academic qualifications, they frequently lack hands-on experience in real garment design and production projects. Conversely, enterprise mentors involved in the modern apprenticeship system possess extensive practical experience but often lack teaching skills and knowledge of educational theory.

## **4. The reform strategy of clothing design and craft teaching based on the modern apprenticeship system**

### **4.1. Optimizing the school-enterprise cooperation mechanism and strengthening top-level design**

The increasing demand for high-quality professionals in the garment industry necessitates innovation and reform in the teaching of garment design and craft in higher vocational colleges. School-enterprise cooperation serves as a crucial prerequisite and guarantee for implementing the modern apprenticeship system. From the perspective of modern apprenticeship, such cooperation in fashion design and craft teaching should not remain limited to theoretical instruction and practical operations but should also delve into dimensions such as curriculum design, teaching content, teaching methods, and evaluation systems<sup>[7]</sup>.

In addition to signing long-term cooperation agreements, both parties should establish joint working groups and hold regular communication meetings to ensure effective dialogue and timely resolution of issues during the cooperation process. This approach can fully harness the educational potential of modern apprenticeship in clothing design and craft teaching. Furthermore, traditional clothing design and craft curricula often prioritize theoretical knowledge and skill demonstrations, limiting students' hands-on opportunities. To address this, teachers should optimize the curriculum system by enhancing school-enterprise collaboration, incorporating more practical training sessions both within and outside the school, and enabling students to apply their professional knowledge and skills under the guidance of "masters" through on-campus project training and off-campus enterprise internships.

In practice, teachers can outline a career development path for students, progressing from "students" to "prospective apprentices," then "apprentices," and ultimately "professional talents." Implementing a flexible learning management and credit system can further guide curriculum optimization <sup>[8]</sup>. Additionally, a feedback mechanism should be established to gather evaluations and suggestions from enterprise mentors regarding students' practical performance, as well as students' reflections on their training experiences. Based on this feedback, adjustments to teaching content and methods can be made to better align with industry needs while enhancing students' vocational skills.

#### **4.2. Clarifying talent training goals and innovating practical teaching**

Clarifying talent training objectives is essential for improving teaching quality and enhancing students' learning outcomes in the reform of fashion design and craft teaching under the modern apprenticeship system. To ensure the relevance and practicality [9] of these objectives, teachers should align them with industry trends and market demands. By analyzing the future development trajectory of the fashion design and craft field, teachers can adjust the curriculum to better meet the industry's actual work requirements, thereby providing students with more targeted vocational skills education.

Talent training goals under the modern apprenticeship system should ensure that students acquire foundational knowledge of fashion design, garment structure, and garment craft, as well as develop professional competencies in garment design, pattern making, and sample garment production. In terms of practical teaching, industry experts or experienced enterprise staff can be introduced as guest lecturers or enterprise mentors <sup>[10]</sup>. Their involvement can provide students with insights into the latest industry knowledge and technologies, as well as opportunities to engage with real-world enterprise practices during their studies.

Additionally, teachers can collaborate with apparel enterprises to develop internship and training programs, granting students access to cutting-edge technologies and management practices in the industry. For instance, enterprise designers can conduct practical demonstrations of clothing design and production, with teachers assisting in the recording and explanation of these sessions for online video classes. Through online teaching platforms, students can repeatedly access high-quality instructional videos to reinforce their practical skills.

During enterprise internships, students can observe enterprise mentors in action and seek their guidance while undertaking tasks independently. This approach not only enhances students' practical abilities but also fosters their innovation skills, preparing them for future challenges in the fashion industry <sup>[11]</sup>.

#### **4.3. Building a "double-qualified" teacher team to improve teaching quality**

In the teaching of fashion design and craft, establishing a team of "double-qualified" teachers is an effective

strategy for enhancing teaching quality. “Double-qualified” teachers can seamlessly integrate theoretical knowledge with practical skills, offering students a more comprehensive, in-depth, and high-quality learning experience.

First, the teacher training system should be continuously improved. Vocational colleges should regularly organize training activities focused on teaching methods, subject-specific knowledge, and industry developments to enhance teachers’ professional expertise <sup>[12]</sup>. Second, cooperation between schools and enterprises should be strengthened. Greater efforts should be made to recruit skilled professionals from the garment industry to facilitate the two-way exchange of talent between enterprises and vocational colleges. For instance, experienced garment design professionals from enterprises can be hired as part-time corporate tutors to guide students in on-campus practical training and provide instruction closely aligned with real-world work scenarios.

Additionally, the composition of the teaching team is crucial. Schools should ensure a balanced ratio of full-time to part-time teachers, forming a complementary teaching team structure. Young teachers should also be nurtured through mentoring programs and other developmental initiatives. Attention should be given to the cultivation of teachers’ professional ethics and values. In teacher recruitment, ethics should be prioritized as the primary criterion for evaluating qualifications, and emphasis should be placed on teachers’ abilities in ideological and political education as well as their adherence to professional ethics. Regular assessments of teachers’ ethical conduct should be conducted, with commendations and rewards for exemplary performance <sup>[13]</sup>.

Finally, schools should establish scientific teaching standards and evaluation systems tailored to the application of the modern apprenticeship model in fashion design and craft teaching. This approach will promote the growth of “double-qualified” teachers and enhance the effectiveness of education in this field.

#### **4.4. Improving teaching evaluation and enhancing students’ professional quality**

Although the modern apprenticeship system has been widely applied in fashion design and craft teaching, various challenges remain in its practical implementation. To address these, teachers should focus on continuously refining the teaching evaluation system to enhance students’ professional quality <sup>[14]</sup>.

First, multi-dimensional evaluation standards should be established. Students’ performance should be assessed comprehensively across dimensions such as knowledge acquisition, skill application, innovation capacity, and teamwork. By evaluating students’ performance in practical fashion design and craft activities, their overall quality and career potential can be more accurately assessed.

Second, the evaluation process should integrate both formative and summative assessments. In addition to assessing students’ final clothing designs or production outcomes, emphasis should be placed on evaluating their performance throughout the design and production process. This includes their innovation, problem-solving abilities, and technical skills. Formative evaluations can motivate students to engage more actively in practical activities, while also identifying and addressing their weaknesses in a timely manner <sup>[15]</sup>.

Lastly, multiple evaluation stakeholders should be involved. Teacher evaluations should assess students’ theoretical understanding and technical proficiency to gauge their academic progress. Enterprise mentors can evaluate the professionalism, quality, and adherence to industry standards demonstrated by students during design and production processes. Peer evaluations can foster collaborative learning and mutual accountability among students. Furthermore, students’ fashion creations can be shared on social media or sold in markets, allowing real consumers to evaluate their work. Such external feedback provides students with valuable insights

into their professional abilities from a societal perspective, helping them identify and refine their career paths.

## 5. Conclusion

In summary, the integration of modern apprenticeship into the teaching of fashion design and craft provides a framework for enhancing students' practical abilities, professional competencies, and innovative capacities. By implementing strategies such as optimizing the school-enterprise cooperation mechanism, clarifying talent training objectives, establishing a "double-qualified" teaching team, and refining teaching evaluation systems, vocational colleges can effectively address industry needs. These efforts contribute to the cultivation of high-quality professionals aligned with the evolving demands of the garment industry, ultimately benefiting both students and society as a whole.

## Funding

2023 Chongqing Vocational Education Teaching Reform Research Project "Research and Practice of Studio Teaching Mode Based on Modern Apprenticeship – Taking Clothing Design and Craft Major as an Example" (Project No. Z233342; Moderator: Guochuan Li); 2023 Chongqing Vocational College of Science and Technology University-Level Project "Research and Practice of Studio Teaching Mode in the Pilot Construction of Modern Apprenticeship – Taking Clothing Design and Craft Major as an Example" (Project No. KJJG202302; Moderator: Guochuan Li)

## Disclosure statement

The authors declare no conflict of interest.

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Bio-Byword Scientific Publishing remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

# Design and Application of Knowledge Graphs and Evaluation System Reconstruction: A Case Study of “Display Technology and Devices”

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**Abstract:** With the advancement of applied undergraduate education, optimizing curriculum systems and innovating assessment methods have become crucial. Taking the course “Display Technology and Devices” as an example, the construction of a knowledge graph and the reconstruction of the assessment system hold significant practical value. This paper elucidates the concept and application of knowledge graphs and the theoretical foundation of assessment systems, analyzes the current state of the course and the issues within the existing assessment framework, and elaborates on the design methodologies and application outcomes of knowledge graphs. It further discusses the principles, objectives, specific contents, implementation strategies, and safeguard measures for reconstructing the assessment system. Finally, the research findings are summarized, and prospective research directions are outlined.

**Keywords:** Applied undergraduate; Display Technology and Devices; Knowledge graph; Assessment system

**Online publication:** February 7, 2025

## 1. Introduction

With the continuous development of applied undergraduate education, optimizing curriculum systems and innovating evaluation methods have become pivotal in improving teaching quality and cultivating professional talents aligned with industry requirements. Display technology, as a vital component of contemporary technological advancements, spans a range of innovations, from traditional 2-dimensional (2D) displays to cutting-edge 3-dimensional (3D) displays. Between July 2023 and January 2024, the National Development and Reform Commission, the Ministry of Industry and Information Technology, the Ministry of Finance, and the Ministry of Education issued several policies <sup>[1-5]</sup> aimed at fostering research on quantum dot displays, holographic displays, and achieving breakthroughs in micro light-emitting diode (LED), laser, and printed display technologies. These policies emphasize achieving large-scale applications with barrier-free, fully

flexible, and 3D stereoscopic display effects while accelerating their deployment in scenarios such as intelligent terminals, connected vehicles, remote communication, and cultural content presentation.

In response to the rapid growth of the display industry, applied undergraduate institutions must emphasize industry-oriented talent training to meet the workforce demands during this “high-speed development period” of the display sector.

The construction of a knowledge graph provides a systematic integration of course content, presenting complex concepts in display technology within a clear and structured framework <sup>[6]</sup>. It facilitates an in-depth exploration of the knowledge system in display technology, encompassing the structures, principles, and related technologies of various 3D displays, including assistive 3D displays, raster 3D displays, integrated imaging 3D displays, volumetric 3D displays, and holographic 3D displays <sup>[7]</sup>.

Reconstructing the assessment system enables the evaluation of students’ learning outcomes and skill levels in a more scientific manner. Diversified assessment methods, including evaluations of experimental skills, project design, problem analysis, and engineering problem-solving abilities, can stimulate students’ enthusiasm and initiative while enhancing their comprehensive competencies.

Using the course “Display Technology and Devices” as a case study, this article demonstrates the construction of a knowledge graph and the reconstruction of the evaluation system. These approaches not only enhance the teaching quality of the course but also provide valuable insights and guidance for reforming other applied undergraduate courses. This work significantly contributes to cultivating industry-ready professionals and advancing applied undergraduate education.

## **2. Analysis of the current situation of the course “Display Technology and Devices”**

### **2.1. Course content updates and iterations**

The course “Display Technology and Devices” is characterized by strong professionalism, high practicality, and rapid knowledge updates. The aspect of strong professionalism is reflected in the course’s integration of knowledge from multiple disciplines, including optics, electronics, and information science, requiring students to possess a solid theoretical foundation and advanced professional skills. The high practicality of the course arises from the extensive application of display technology and devices in the design, manufacturing, program development, testing, debugging, and technical management of optoelectronic devices and systems. During the teaching process, students are expected to acquire practical operational skills for product development through hands-on activities such as experiments and project design <sup>[8]</sup>.

The rapid pace of knowledge updates stems from the continuous advancements in the display technology industry. As a critical component of modern technological development, the industry evolves quickly with the emergence of new display technologies and devices. Consequently, the course content must be frequently revised to align with industry developments <sup>[9]</sup>. In summary, the knowledge content of the course requires timely adjustments to accommodate both its intrinsic characteristics and the industry’s progress. The construction of a knowledge graph offers an effective solution to meet the course’s teaching needs, underscoring the urgency of creating a visual knowledge graph tailored to industry requirements.

### **2.2. Problems with the existing evaluation system**

The current evaluation system exhibits issues such as reliance on a single assessment method, limited

involvement of diverse evaluation subjects, and the absence of process-oriented assessments. In the evaluation system for the course “Display Technology and Devices,” assessments are predominantly based on final examination scores, which fail to adequately measure students’ practical abilities and innovative thinking. Sole reliance on theoretical exams makes it challenging to comprehensively evaluate students’ mastery of knowledge and their capacity for practical application.

Moreover, the evaluation system lacks a process-oriented approach, providing insufficient feedback during the learning process. This absence of ongoing assessment can lead to a lack of engagement and clear objectives in the learning experience. Students often resort to short-term, intensive review sessions before exams, which impede a deep understanding of knowledge and its transformation into practical skills. As a result, students may feel uncertain about their learning progress, making it difficult to undertake targeted adjustments to their study strategies.

In summary, the shortcomings of the existing evaluation system hinder the teaching quality of the “Display Technology and Devices” course and the comprehensive development of students. This situation necessitates immediate reforms to improve the system.

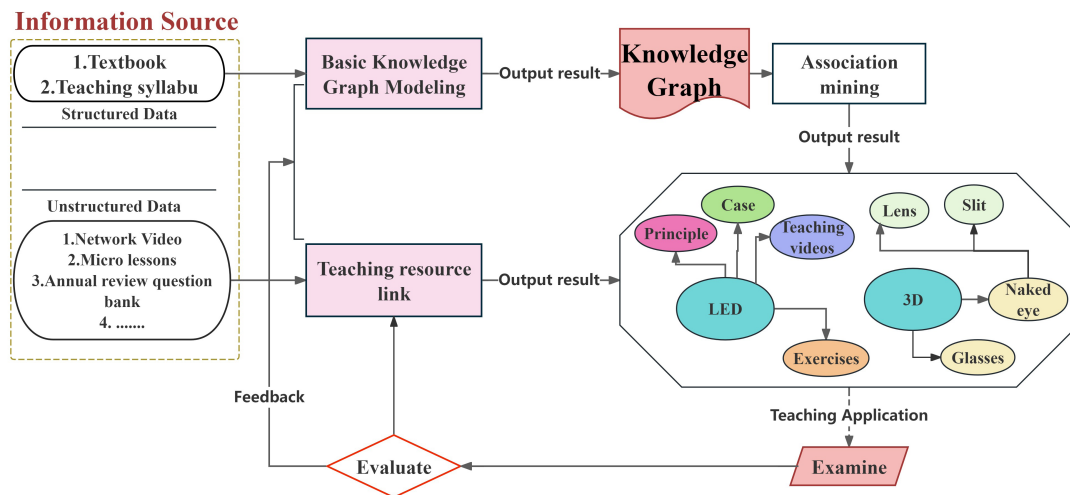
### **3. Construction of knowledge graph for the course “Display Technology and Devices”**

A knowledge graph is a semantic network with robust expressive capabilities and modeling flexibility, capable of representing entities, concepts, and their interrelationships in the real world<sup>[10]</sup>. Its attributes include structural organization, visualization, semantic clarity, scalability, and efficiency. In the educational domain, a knowledge graph serves as a structured and standardized technical tool for expressing and encapsulating teacher expertise or subject knowledge. By linking fragmented teaching resources, establishing associations between disparate educational data, and creating technological value, it provides essential knowledge support for intelligent educational services. These services include semantic search, personalized recommendations, user profiling, intelligent questions and answers (Q&A), behavior prediction, precise analysis, and decision-making support.

During the process of constructing a course knowledge graph, a blended learning approach is applied. This approach organizes course knowledge points and integrates them with industry-driven issues or technological paths within the knowledge graph system<sup>[11]</sup>. This methodology assists students in developing a comprehensive knowledge framework, enhances their analytical capabilities in solving practical problems during the production of display devices, fosters collaborative learning, and cultivates teamwork skills<sup>[12]</sup>.

#### **3.1. Construction of knowledge graph**

The knowledge graph is constructed by identifying key knowledge points, analyzing their logical relationships, establishing interconnections between them, and using specialized drawing software to visualize the resulting knowledge system. This visualization simplifies the learning process for students and supports teaching efforts. For instance, light-emitting diode technologies such as LED and organic light-emitting diode (OLED) are interconnected with the display principles of liquid crystal displays (LCDs), while the three primary color principles interact with various display technologies to achieve color rendering. Structuring these logical relationships enables students to develop a deeper understanding of the course content.



**Figure 1.** Construction of knowledge graph and teaching process for the course “Display Technology and Devices”

To construct the knowledge graph, various layout methods such as force-directed, circular, grid, tree, radial, and cluster layouts are utilized, with the selection of a specific layout based on the graph’s characteristics and the teaching objectives<sup>[13]</sup>. For hierarchical relationships between knowledge points, a tree layout can clearly display the hierarchical structure, as illustrated in **Figure 1**. Furthermore, the visualization technique enables the division of the knowledge graph’s plane into multiple regions. Using the information on these divisions and corresponding layout requirements, the positioning of nodes and relationship edges can be effectively arranged and displayed.

Additionally, the visualization implementation leverages force-directed layout methods based on physical simulations. By balancing forces within the graph data and rendering the final visualization, the method enhances the graphical representation and clarity of the knowledge graph. This approach not only improves the teaching experience but also aids in the effective comprehension of complex relationships within the course content.

### 3.2. Application effect of the knowledge graph

The application of the learning navigation function provided by a knowledge graph enables students to better comprehend course content and enhances their learning efficiency. In the course “Display Technology and Devices,” the knowledge graph interconnects numerous knowledge points, such as diodes, LEDs, OLEDs, and LCDs, to establish a comprehensive and coherent knowledge framework. By organizing logical relationships, the knowledge graph helps students systematically master course concepts, avoiding the pitfall of studying knowledge points in isolation.

Furthermore, based on the characteristics of the knowledge graph and specific teaching requirements, visual presentation methods are utilized to deliver an intuitive and engaging learning experience. These visual aids provide clarity, allowing students to better grasp complex relationships and technologies.

During the instructional design phase, teachers can utilize the relationships between knowledge points within the knowledge graph to organize and sequence teaching content effectively. For instance, when introducing 3D display technology, teachers can reference the structure, principles, and associated technologies of various 3D display systems, such as assistive 3D displays, raster 3D displays, and integrated imaging 3D

displays, as mapped within the knowledge graph. This targeted approach facilitates focused instruction and promotes a deeper understanding of advanced topics in display technology.

#### **4. Reconstruction of the evaluation system for the course “Display Technology and Devices”**

Course assessment and evaluation play a pivotal role in enhancing teaching quality. A well-designed assessment system facilitates a comprehensive understanding of students’ learning outcomes and skill levels, providing a foundation for continuous improvement in teaching practices <sup>[14,15]</sup>. The current reliance on single-process assessment standards often results in “equalization,” with insufficient feedback preventing students from gauging the quality of their learning and making necessary adjustments. This situation can foster a mindset focused on merely earning credits rather than achieving meaningful learning outcomes.

The principles guiding the reconstruction of the evaluation system emphasize objectivity and comprehensiveness. By fully accounting for the professional, practical, and rapidly evolving nature of the course, the evaluation system should adopt diverse assessment methods to ensure objectivity in both content and criteria. The evaluation process must minimize subjective influence and rely on objective evidence. For instance, when assessing experimental skills, clear criteria and standardized procedures should be established to reduce variability caused by human factors, ensuring consistent and unbiased outcomes.

The primary objective of restructuring the evaluation system is to enhance students’ practical skills, innovative thinking, and overall competencies. Given the high practicality of the “Display Technology and Devices” course, the restructured system must prioritize hands-on activities such as experiments and project design, thereby encouraging students to actively engage in these activities and elevate their proficiency in practical applications.

##### **4.1. Reconstruction ideas for the evaluation system**

Based on the unique characteristics of the course and the limitations of traditional evaluation methods, such as reliance on “homework, attendance, and closed-book exams,” the evaluation system should evolve to align more closely with talent development goals and industry requirements. Key aspects of this reconstruction include:

- (1) Process assessment: Increasing the proportion of continuous assessment components, such as classroom performance, homework completion, and project participation, is crucial for promoting active engagement. Regular assessments ensure that students remain motivated and focused on their learning. For instance, teachers can assign grades based on student’s participation in class activities, such as discussions and presentations, to foster critical thinking and encourage active contribution.
- (2) Diversified evaluation subjects: Introducing multiple evaluators, including peer and industry assessments, can improve the objectivity and comprehensiveness of the evaluation process. Peer evaluation enables students to reflect on their own and their peers’ learning outcomes, promoting critical thinking and collaboration. For example, students can evaluate each other’s projects based on innovation and practicality after completion. Industry evaluations provide real-world insights, offering valuable feedback that bridges the gap between academic learning and professional expectations.
- (3) Practical ability assessment: Emphasizing the assessment of practical skills, such as experimental

reports, project designs, and internship performance, is essential for a course characterized by high practicality. Experimental reports offer insights into students' understanding of experimental procedures, operational skills, and data analysis capabilities. Similarly, project design assessments evaluate students' innovative thinking and ability to apply interdisciplinary knowledge comprehensively. Strengthening these assessments ensures that students acquire the hands-on experience needed for their professional growth.

## **4.2. Implementation of the evaluation system**

To ensure the effective implementation of the evaluation system for the “Display Technology and Devices” course, comprehensive evaluation standards and detailed implementation rules must be established. The evaluation criteria should clearly define specific requirements and scoring metrics for each assessment component. For instance, criteria should outline the scoring standards for classroom performance, homework completion, and project participation as part of the process assessment. Similarly, the weight allocation for each evaluation subject in the diversified assessment framework should be specified.

The implementation rules must include a timeline for assessments, detailed procedures for executing various assessment methods, and feedback mechanisms for communicating assessment results. By developing scientific and reasonable evaluation standards and implementation guidelines, the process can be standardized, ensuring fairness, transparency, and smooth operation of the evaluation system.

The integration of assessment and evaluation throughout the teaching process allows for a more comprehensive review of students' learning attitudes and innovative ideas. Establishing a robust feedback mechanism enables the collection of information regarding students' engagement and creativity, facilitating timely adjustments to assessment content and methods. This approach enhances the comprehensiveness and effectiveness of the evaluation system. Additionally, teachers can provide feedback and recommendations through this mechanism, promoting the continuous refinement of the evaluation system.

## **5. Conclusion**

In the “Display Technology and Devices” course, the construction of a knowledge graph offers a systematic integration of complex knowledge points, encompassing topics such as display device technology and 3D display systems. By leveraging knowledge graphs, students gain a better understanding of course content, improve their learning efficiency, and enhance their self-learning capabilities.

The reconstruction of the evaluation system has further motivated students, encouraging active participation in the learning process and fostering comprehensive skill development, which enhances their employability. Process assessment, with its emphasis on classroom performance, homework completion, and project involvement, increases the proportion of continuous evaluation, driving student engagement. The introduction of diversified evaluation subjects, such as peer evaluations and feedback from industry professionals, improves both the objectivity and thoroughness of assessments.

With advancements in artificial intelligence and big data technology, more precise analysis and evaluation of students' learning processes can be achieved. For instance, behavioral data from online learning platforms can be analyzed to understand students' habits and progress, offering personalized teaching recommendations and tailored assessment plans for educators.

Furthermore, ongoing refinement of assessment standards and implementation rules, along with the establishment of a more efficient feedback mechanism, is essential to ensure the system's continued effectiveness. These efforts collectively enhance the teaching quality of the course and contribute to the cultivation of skilled, innovative professionals.

## Funding

Collaborative Education Project of the Ministry of Education Through Industry-University Cooperation “Exploration and Practice of Practical Course System for Microelectronics Major Based on Modern Industry College” (Project No. 220901282145427); Key Project of Chengdu Technological University “Research on the Impact Mechanism and Performance Improvement of Visual Comfort in Integrated Imaging 3D Display” (Project No. 2023ZR004)

## Disclosure statement

The authors declare no conflict of interest.

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# A Way to Solve the Crisis of Higher Education from the Perspective of Professional Personnel Training

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**Abstract:** The crisis of higher pedagogy has been a concern of the academic circle for a long time, among which scholars are generally worried about the institutional crisis of the discipline, in which judgment is not entirely based on facts. The deep crisis of the discipline shows the lack of internal academic character and the need to improve external function. Starting from the facts, some scholars have a clear understanding of the development direction of the discipline, which can help them make a basic judgment. At the same time, the key is to cultivate professional talents to reach the discipline consensus and effectively preserve the discipline's strength. From the perspective of professional personnel training, this paper discusses the proposal of relevant theories, analyzes the existing problems of higher education, and puts forward strategies to solve the crisis of higher education, aiming at giving full play to the effectiveness of the discipline and laying a talent foundation for the sustainable development of the discipline.

**Keywords:** Training of professional talents; Higher education; Crisis cracking

**Online publication:** February 7, 2025

## 1. Introduction

Higher education is a special discipline. Through the efforts of several generations of educators, higher education has acquired a legitimate identity. After a period of development, it has gradually formed an international special discipline system, which is conducive to the rational allocation of resources<sup>[1]</sup>. Although higher pedagogy has been debated by disciplines and research fields, scholars' research has not yet promoted the construction of disciplines. Based on the background of strong education, the status and value of higher education have been continuously enhanced, and it has become the core of the education system. The country needs to strengthen expectations for higher education and bring greater pressure to the development of this discipline. In the current era, the development of higher education is facing shocks and challenges. To deal with this problem, the government needs to pay attention to solving the crisis of higher education and significantly

improve the quality of education<sup>[2]</sup>.

## **2. Put forward the theory of professional personnel training**

From the actual situation, the academic circle has carried out a series of discussions to solve the crisis of higher education. First, the construction of a theoretical system. Among them, Tianxiang Xue, Maoyuan Pan, and others wrote Higher Pedagogy. Although different scholars have different starting points, they all discuss the content of theoretical construction. Second, explore the relevant research objects. In the current era, the academic circle mainly analyzes the objects of higher education and puts forward various viewpoints, such as the law of higher education, undergraduate education, and so on, but the academic circle gradually forms a consensus according to the objects of research. Third, attach importance to the analysis of research methods. In the article “Higher Education Research from Multi-Disciplinary Perspective”, scholar Maoyuan Pan puts forward specific arguments to clarify the characteristics of higher pedagogy, that is, the characteristics of multi-disciplines. Through his arguments, he can provide references for the integration of research paradigms of multiple disciplines and point out the direction for the development of related research. Fourth, give full play to the role of higher pedagogy. In the study of higher education, the research mark refers to Xianjun Liu’s integration into the research paradigm of colleges and universities according to the American experience and actively carrying out relevant research activities to provide assistance for the colleges themselves, promote the development of higher education, and innovate the form of service to improve the service effect.

The proposal of relevant theories shows that some higher education scholars have a clear cognition of the development direction of the discipline. To effectively implement relevant research, the academic consensus reached by the academic community is indispensable. Discipline activities can cultivate a large number of reserve talents with firm faith and high professional accomplishment, which can guarantee the stable and healthy development of the discipline. The above academic research shows that the proposition of professional personnel training is put forward<sup>[3-4]</sup>.

## **3. The problems of higher education**

In the current era, the practical explanatory power of higher pedagogy has declined, which is not only unable to answer and explain the new phenomenon in the field of practice but also difficult to answer and explain the special phenomenon in the field of practice<sup>[5]</sup>. Today’s higher education activities, no matter their concept or practice, have emerged many phenomena beyond the traditional concerns of higher education, such as student-oriented, innovation and entrepreneurship education, profit and non-profit, and so on. The emergence of new concepts and things has broken the traditional cognition of higher education. In higher education, one of the tasks is to deepen the understanding of higher education issues with the help of basic theories of education and carry out research on basic theories to guide higher education. Higher pedagogy is a kind of theoretical system, and its theoretical value is manifested in answering new questions promptly and gradually forming new theories. Through the practice of higher education, it is not difficult to find that under the background of the elite era, the problems encountered by higher education are diversified, and the problems of higher education in market economy countries are different from those in planned economy countries. In addition, with the rapid development of higher education, there are still special phenomena of practice that cannot be explained. Taking the popularization theory proposed by Martin Tur as a case, the theory originally belonged to the description

of the phenomenon of the scale expansion of Western higher education, and it was promoted in the country without revision, which not only contradicts the original intention of the proposer but also does not accord with the reality of the country, so many problems have appeared <sup>[6]</sup>.

## **4. The strategy of the crisis of higher education from the perspective of professional training**

### **4.1. Establish discipline beliefs and cultivate the cultural identity**

Strengthening students' discipline beliefs and identity has become a key element to restructure discipline culture and promote discipline development <sup>[7]</sup>. Under the background of the current times, spiritual and academic problems have appeared in the research of higher education disciplines. The emergence of these problems has seriously hindered the sustainable development of higher education. To get rid of the discipline dilemma, to a large extent, comes from whether the postgraduate group firmly believes in the discipline and maintains a high sense of discipline mission, to better carry out discipline construction. Only academics have a strong interest in the discipline, to actively explore scientific research and make more contributions. Among them, there are still many problems to be explored for higher education, such as people's opinions lack consistency and there is still a variety of censure, so if students lack cognition, the actual effect is poor and their future achievements are relatively limited.

Traditional preaching and indoctrination are not feasible to strengthen the discipline belief. The teacher's guidance should be strengthened to increase the students' discipline identification. On the one hand, teachers need to help students learn the theory, history, and other contents of higher education disciplines, such as encouraging students to read Higher Education, Maoyuan Pan's Oral History of Education, and other relevant works, to help students understand the development of higher education, clarify its historical context, find the existing crisis, to enhance the sense of mission and crisis of the discipline. In addition, students can also feel the discipline development activities of Maoyuan Pan and other scholars, understand their difficult positions, and strengthen students' belief in discipline with the help of exemplary education. On the other hand, teachers can choose appropriate teaching methods, such as theoretical exposition, deep communication, and practical experience, to deepen students' understanding of the complexity and openness of higher education and comprehensively understand the explanatory and guiding power of higher education research. In addition, according to students' subject background and personal interests, teachers need to help them break the discipline threshold as soon as possible and adjust their career goals and research directions reasonably <sup>[8]</sup>. The implementation of the above activities can improve the loyalty of teachers and students to higher education disciplines, create a common culture of disciplines, and promote the development of higher education disciplines.

### **4.2. Break the shackles of disciplines and promote the development of education**

In higher education disciplines, to help students form research positions, it is necessary to pay attention to the establishment of discipline beliefs and lay a solid knowledge foundation <sup>[9]</sup>. Take the position basis as a reference to break the restriction of discipline barriers and help students integrate different discipline horizons.

First, it is necessary to cultivate interdisciplinary vision and solve complex problems in higher education as the goal of talent training. Based on the interdisciplinary characteristics of higher education itself, it is necessary to solve theoretical problems or practical problems according to the complex and diversified practical problems

of higher education. It is urgent to have a group of high-quality talents with an interdisciplinary vision that can effectively combine multi-disciplinary knowledge. In this regard, all personnel training units need to give full play to the advantages of multi-disciplinary students, pay attention to the introduction of interdisciplinary vision, and design reasonable personnel training goals <sup>[10]</sup>.

Second, carry out interdisciplinary talents joint training activities to ensure the organization of activities <sup>[11]</sup>. Although the current academic community has reached a consensus on interdisciplinary training, compared with the traditional discipline system, interdisciplinary training is a new concept, that still needs the support of organizational mechanisms and a research atmosphere, and at the same time, targeted adjustment. On the one hand, the personnel training unit should take the national strategy of interdisciplinary personnel training as the basis, and according to the actual research situation of the unit, effectively unite with the college, and strengthen the relevant personnel training activities. On the other hand, the personnel training unit can encourage teachers and students from different colleges to integrate into higher education research links under the carrier of projects and topics, to create a good environment for postgraduate students to carry out interdisciplinary activities <sup>[12]</sup>.

Third, emphasis should be placed on interdisciplinary courses to expand the space for curriculum creation. All personnel training units should pay attention to students, encourage them to analyze disciplinary backgrounds and research interests, and actively carry out study practice involving interdisciplinary courses. However, according to the monographs of scholars such as Burton Clark and Pan Mao-yuan, the subject types should include psychology, history, sociology, and so on, which should be integrated into the interdisciplinary field of study. In the above process, the focus of attention is to break the discipline barriers, provide development support for higher education disciplines, and effectively coordinate various disciplines according to the characteristics of teaching integration, to solve the problems in higher education <sup>[13]</sup>.

### **4.3. Optimize practical experience and improve the quality of education**

From the essence level, China's higher pedagogy belongs to the applied discipline, which has had rich practical elements since its birth. Whether it can show its practical function is the necessary proof of the legitimacy of the discipline <sup>[14]</sup>. In this regard, in the training of professional talents, no matter what kind of research activities are carried out, it is necessary to face up to the contradictions existing in the practice of higher education, to provide new horizons, ideas, and strategies for macro decision-making and teacher and student development. However, except for the EDD with 5 years or more work experience in the past, most postgraduates have insufficient experience in college practice from school gate to school gate, and their research often lacks reference value, which makes higher education face the dilemma of insufficient problem-solving ability. Therefore, in the personnel training activities, it is necessary to attach importance to the development of practical experience, effectively improve students' ability to combine theory with practice, and reasonably deal with complex affairs in colleges and universities, which can be started from the following perspectives.

On the one hand, curriculum construction and teaching reform activities need to have obvious practical characteristics. For the construction activities of practical courses, colleges need to actively carry out practical teaching with the help of good higher education courses, such as college management activities, college strategy and planning, and other related courses. From the perspective of teaching methods, the selection of specific course contents should pay attention to the reform and development of higher education, pay attention to the authenticity of performance, and effectively integrate the theory and practice of higher education with the help of representative and typical cases, to effectively improve the education effect. For example, Hongcai

Wang's research showed the significance of long-term curriculum reform activities, sorted out the situation of universities and students, identified the confusion of students, solved practical problems in time, and actively selected relevant cases, such as higher education research courses, conducted in-depth analysis on the scholarship system combined with its cases. Encourage students to use appropriate research methods to carry out in-depth exchanges on practical problems, and to put forward targeted opinions. In the above process, the principles to be followed in the selection of cases can be clearly defined. It is not only necessary to understand the real cases of higher education disciplines, but also to constantly adjust the practical courses according to the disciplinary background and personal experience.

On the other hand, emphasis should be placed on the optimization of specialized practice links. In the practice teaching activities, it is necessary to reflect on the experience of higher education, understand the talent training activities, and actively carry out the implementation of teaching, scientific research, social, and other practical activities. In this process, teaching and research practice can mainly provide students with a variety of choices, such as acting as a teaching assistant, participating in academic conferences, and so on, to help students deeply understand the theories, knowledge, and methods of higher education in practice. The development of social practice can strengthen the ties between different departments of colleges and universities, actively build partners, stimulate students' enthusiasm for participation, and carry out in-depth analysis and exchange activities with the help of deep experience and practical problems. At the same time, students can accumulate practical experience and significantly improve the effectiveness of research. In the practice of higher education, the key issues that need to be paid attention to are the supervision and effect evaluation of professional teachers, as well as the understanding of the personnel of various departments, and the effective implementation of practice guidance and consultation activities, to significantly improve the effectiveness of practice <sup>[15]</sup>.

## 5. Concluding remarks

To sum up, with the development of higher education, its disciplinary attributes and mature characteristics become more and more prominent. It belongs to one of the disciplines with strong application and is a highly interdisciplinary field, but it is affected by technology. In this regard, to promote the maturity of higher education, it needs to be given more time and support. Since the emergence of higher education, it has been the core topic. The maturity of higher education mentioned in it needs to be explained, guided, and other activities to promote practice. From the perspective of professional personnel training, it is necessary to pay attention to the establishment of discipline belief, optimize practice experience, and perform other activities to promote the development of higher education.

## Disclosure statement

The author declares no conflict of interest.

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# Exploration of the Innovation of Teaching Path of “Five-dimensional Integration of Ideology and Politics” in Explaining Skills (Foundation) Course

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**Abstract:** This article discusses the overall design of the secondary vocational tourism service and management major core curriculum “Explaining Skills (Foundation)”, focusing on the revitalization of rural tourism. Based on the rural theme tourism explanation module, from the teaching objectives, curriculum content, teaching resources, curriculum implementation, assessment and evaluation of the five dimensions of the curriculum thinking and politics, “Explaining skills (Foundation)” course ideological and political “five-dimensional integration” teaching path innovation is discussed and analyzed.

**Keywords:** Explaining skills; Curriculum thinking and politics; Five-dimensional integration; Rural theme tourism; Teaching path innovation

**Online publication:** February 7, 2025

## 1. Introduction

Under the background of the deep integration of culture and tourism, the quality requirements of employees in the tourism industry are increasing day by day. Cultivating “knowledgeable, skilled, moral and quality” cultural tourism talents who can spread Chinese culture, Chinese spirit, and Chinese values has become the core quality goal of secondary vocational tourism professionals<sup>[1]</sup>. However, at present, the students of tourism major in secondary vocational schools have a low degree of professional recognition and a large amount of talent loss after employment, which has become a major drawback affecting the high-quality development of tourism. In the teaching of tourism courses, the phenomenon of emphasizing knowledge and skills and neglecting moral qualities still exists widely. There is a phenomenon of “two skins” between professional education and ideological and political education in professional teaching.

Curriculum ideological and political education is a comprehensive educational concept, aiming to build a whole-course education pattern, all kinds of courses and ideological and political theory courses in the

same direction, forming a synergistic effect, with “moral cultivation” as the fundamental task of education, requiring ideological and political education into all kinds of curriculum teaching. This is to cultivate students’ ideological and political quality, moral quality, and social responsibility as the goal, and to promote the all-round development of students <sup>[2]</sup>. The president of the CCP stressed that “all kinds of courses and ideological and political theory courses should be in the same direction to form a synergistic effect” <sup>[3]</sup>. Tourism courses have inherent advantages in carrying out curriculum ideology and politics due to their professional nature, talent training needs, course content, and so on because there are rich curriculum ideological and political elements that can be mined in their professional courses. Ideological and political elements are “gene-style” integrated into professional teaching to improve students’ professional quality and at the same time achieve the silent effect of educating people, to implement the fundamental task of cultivating morality and cultivating people <sup>[4]</sup>.

The “Explaining Skills (Foundation)” course is the core course of the tourism service and management major of the university, which plays an important role in the quality of talent training for this major. According to the national and industry standards, as well as the tourism industry’s demand for talent training, the professional teaching of this course has condensed the ideological and political main line of “four and three inheritances” reflecting the professional characteristics of tourism, which focuses on serving people, taking tourism resources as the core and requiring practitioners to have high skills, excellent service, and strong responsibility, and formed the teaching path of “five-dimensional integration” <sup>[5]</sup>. It is of great reference significance for the promotion to other courses of tourism majors.

As a course with rich ideological and political elements and various practical forms, Explaining Skills (Foundation) runs through the main line of ideological and political education in five dimensions: teaching objectives, course content, teaching resources, course implementation, assessment, and evaluation <sup>[6]</sup>. It aims to cultivate students’ knowledge, skills, and moral qualities as the standard, and improve students’ recognition and loyalty to their careers. Guide students to establish a correct worldview, outlook on life, and values.

The following is the “Explaining Skills (Foundation)” course revitalization voice: rural theme tourism explanation module as an example to specifically explore and analyze the “Explaining Skills (Foundation)” course ideological and political “five-dimensional integration” teaching path.

## **2. Course objectives: The establishment of three-dimensional course objectives, fully reflect the ideological and political elements**

Curriculum objectives are the guidance and basis of the “five-dimensional integration” teaching path of curriculum ideology and politics. In the Voice of Revitalization: Rural theme tourism teaching module, educators should first clarify the curriculum objectives.

Knowledge objective: to be able to memorize the basic knowledge of explaining materials; Be able to distinguish the basic characteristics of different types of tourist groups; Be familiar with the writing standards of tour guides on the theme of rural revitalization; Grasp the basic norms of the situation language and sound language of the guide’s explanation of the theme of rural revitalization.

Ability objective: Be able to collect, select, and organize tour guide materials; Be able to cope with the individualized and subdivided needs of different tourists in rural tourism; Be able to write high-quality tour guide words on rural revitalization; and can complete excellent rural revitalization theme tour guide explanation.

Accomplishment goal: To improve the comprehensive humanistic accomplishment and enhance the

professional awareness and accomplishment of inheriting the excellent Chinese culture; Adhere to the personalized service standards of tour guides and cultivate tourism-oriented professional quality of tour guides; Cultivate a practical and serious work style of tour guide, and practice the spirit of “craftsman” of tour guide who strives for perfection; Develop the spiritual identity of rural culture and national feelings, and enhance the pride of Chinese culture, spirit and values.

The establishment of curriculum objectives not only ensures that professional students can obtain explanatory knowledge and ability in the study of this module but also fully integrates ideological and political elements into the knowledge objectives, ability objectives, and quality objectives. For example, the analysis of the basic characteristics of tourists in different types of tour groups is not only a knowledge mastery goal, but also fully integrated into the ideological and political elements that enable students to develop a sense of social responsibility and humanistic care, learn to respect and understand the cultural background and needs of different tourists, and reflect the values of inclusiveness and diversity. Writing high-quality explanations and completing excellent explanations is not only a basic skill goal, but also allows students to convey the achievements, positive energy, and beautiful vision of rural revitalization tourism through writing and explaining, naturally stimulating patriotic enthusiasm and national pride, and consciously cultivating the spirit of “craftsman” of tour guides who strive for excellence. The accomplishment goal is to precisely extract the ideological and political elements of the course teaching for students’ general and professional accomplishment improvement based on achieving knowledge and skill improvement <sup>[7]</sup>.

### **3. Course content: Optimize the carrier of teaching content and highlight the main line of ideology and politics**

Course content is an important carrier of the “five-dimensional integration” teaching path of curriculum ideology and politics. In the Voice of Revitalization: Rural theme tourism teaching module, the teaching content is optimized, and Haotian Carbon neutral Park in Huangxinhuang Village, Cuandixia Village, Xiwa Village intangible cultural heritage shadow play and Anji Yu Village are selected as the representatives of rural revitalization to form a low-carbon village and talk technology; The ancient village, the culture; Intangible heritage village, speech inheritance and ecological village, Fu agriculture “new” four teaching projects. Centering on the theme of “Science and technology, culture, intangible cultural heritage and ecology”, with the rural revitalization strategy as the core, the whole process runs through the purpose of ideology education. The teaching situation integrates thoughts and politics in an immersive way, excavates the knowledge system and cultural essence of rural development, arouses students’ understanding and emotional resonance of rural revitalization, and contributes youth wisdom and strength to China’s rural tourism <sup>[8]</sup>. Train them to become the main force of cultural tourism in the new era with a sense of social responsibility and historical mission.

Huangxinhuang Village Haotian Carbon Neutral Park is the country’s first full life cycle carbon neutral park, located in Huangxinhuang village, Liangxiang Township, Fangshan District, Beijing. The reason for choosing this teaching carrier is that the park is geographically close to the school, and the sense of geographical distance can make students feel the vigorous development of the new tourism industry of rural science and technology around them in the process of learning. They are naturally proud of the role and value of China and even Chinese villages in promoting the world’s carbon peak and stimulating students’ interest in learning.

Cuandixia Village is located in Zhaitang Town, Mentougou District, Beijing. It was built in the Yongle

Period of the Ming Dynasty. It has a long history and profound cultural heritage. The rural folk houses in Cuanxia Village are representatives of the ancient architecture group of mountain villages in northern China. They are derived from the military town history and culture of the past, the business travel culture relying on the ancient road, the folk culture rooted in Zhaitangchuan, and the red culture of inheriting the “model village of the War of Resistance.” These cultural elements together constitute an abundant historical and cultural connotation of Cuanxia Village<sup>[9]</sup>. By choosing this teaching carrier, students in the process of completing the learning task, it is necessary to carry out a careful exploration of ancient Chinese residential architecture, to North China Pass, post road, war of resistance, and other historical cultures in-depth understanding, to imperceptible cultural confidence rooted in the hearts of students.

Xiawa Village is located in Shangzhuang Town, Haidian District, Beijing, where the Beijing West Shadow Play Museum is built. It is a comprehensive museum integrating the display, inheritance, and experience of shadow play art, with profound historical and cultural deposits and unique artistic charm<sup>[10]</sup>. Visitors can feel the charm of intangible shadow play and understand the development process and production process of shadow play art here. In recent years, it has attracted a large number of overseas Chinese tourist groups to visit. By choosing this teaching carrier, students can deeply understand the traditional culture and strongly feel the national feelings such as national pride and sense of belonging in the process of writing and explaining the formation, production process, and art display forms of intangible shadow play.

Yucun, located in Tianhuangping Town, Anji County, Huzhou City, Zhejiang Province, is the birthplace of the “Two Mountains” theory. Yu village has a long history. According to the records of Anji County, relevant records have been recorded during the reign of Jiajing in the Ming Dynasty. In the 1960s, to develop the village-level economy, Yu village began blasting mountains for mining, which resulted in the destruction of the ecological environment. In 2001, Zhejiang Province proposed to build an ecological province, and Yu Village gradually shut down its mines and cement factories and began to explore a new road of development<sup>[11]</sup>. This concept emphasizes the dialectical unity relationship between ecological environment protection and economic development and points out the direction for the development of Yu village and even the whole country. Under the guidance of the “two Mountains theory”, Yucun changed its development ideas and vigorously developed rural tourism, realizing the transformation and upgrading from “selling stones” to “selling scenery” and “selling culture.” Yu Village has won the national beautiful livable demonstration village, the national civilized village, and other honorary titles, Yu village has realized the win-win situation of economic development and ecological protection and has become a model of ecological civilization construction in the country and even the world<sup>[12]</sup>. By choosing Yucun as the teaching content, students can intuitively feel the development road of rural tourism revitalization, enhance ecological awareness, and establish a correct ecological outlook and development view. Students can deeply feel the importance and urgency of the national rural revitalization strategy, and stimulate the enthusiasm and motivation to contribute to rural revitalization. Strengthen students’ sense of social responsibility and historical mission, and guide them to make their contributions to realizing the Chinese dream of the great rejuvenation of the Chinese nation.

#### **4. Teaching resources: Comprehensive resource construction to ensure the realization of ideological and political education in professional teaching**

The construction of teaching resources is the guarantee and support of the “five-dimensional integration”

teaching path of curriculum ideological and political education. The construction of digital intelligence hardware and software resources provides more abundant and diversified teaching methods and platforms for the comprehensive integration of ideological and political mainlines in professional courses and helps to enhance the attractiveness and effectiveness of ideological and political education.

#### **4.1. The construction of software and hardware resources of digital intelligence enriches the means of ideological and political education**

To build and make full use of smart classrooms and tourism training rooms to create digital and immersive teaching environments. The smart classroom provides a more intuitive and vivid teaching environment for ideological and political education in professional courses by integrating a variety of intelligent teaching equipment, such as intelligent large-screen blackboard, interactive screen, iPad, and so on. Teachers can use these devices to combine the ideological and political elements of the course with practical explanations of cases and stimulate students' learning interest and participation through simulation scenarios and group exercises. At the same time, smart classrooms also support remote teaching and interaction, breaking the limitations of time and space, and realizing the sharing and optimization of teaching resources.

The use and construction of the Superstar learning platform, AI evaluation system, simulation live broadcast system, Tencent documents, and other software conditions, to achieve "online and offline" mixed teaching and personalized learning, to achieve teaching and learning time and space break the boundary. Superstar Learning Channel provides a large number of rich ideological and political teaching resources for teachers. By using the platform, teachers can release learning tasks and teaching resources, quickly obtain students' learning statistics and technologies, accurately evaluate students' learning, and guide students to study and explore independently. Meanwhile, the platform also supports online discussion, group activities, homework submission and evaluation, etc., which helps teachers adjust teaching strategies in time and students to exert their subjective initiative in learning. Cultivate students' self-discipline, innovation, teamwork, and other qualities. Through big data analysis and machine learning technology, the AI evaluation system can accurately grasp students' learning characteristics and effects. In curriculum ideological and political education, teachers can use AI evaluation systems to monitor and analyze students' learning progress and ideological dynamics in real-time, adjust teaching strategies and content according to the analysis results, and realize personalized teaching and precise guidance. The simulated live broadcast system provides a real-time interactive platform for the realization of live tour explanation and practical learning. Teachers and students can live broadcast through the live broadcast platform, participate in discussions and interactions, and truly simulate the realistic live broadcast environment of tourism. In the live broadcast or interaction, students also learn and practice the ideological and political elements that should be paid attention to in new forms of live tourism, such as network security, network ethics, and network conventions.

#### **4.2. Teaching team building: Build a diversified teaching team and strengthen ideological and political leadership**

The teaching team is the core strength of the "five-dimensional integration" teaching path of ideological and political education. In the teaching module of Revitalizing Voice — Rural theme tourism explanation, a diversified and complementary teaching team of professional teachers + industry teachers + internal experts + external experts has been formed.

Three professional teachers and one industry teacher are the main speakers of the teachers' team. The three teachers have solid professional and teaching experience and regularly participate in teacher training to conduct "professional + ideological and political" research, mainly including theoretical research on ideological and political teaching in the curriculum and academic research in the field of tourism under the ideological and political elements, such as red tourism, research tourism, and other related training and research, to improve their professional teaching awareness and level of ideological and political education<sup>[13]</sup>. A professional teacher is a senior tour guide in Beijing, with rich experience in the field, which can provide students with more practical experience in explaining the frontline and in contact with tourists. In the teaching process, he will more naturally integrate humanistic service explain the "craftsman" spirit and other key points of ideological and political education, and strengthen the role model leading the students.

The school experts participate in professional teaching, mainly the ideological and political teachers of the basic teaching Department + the teachers of the student development Center participate in the teaching content design and teaching evaluation. The professional teachers actively cooperate with the ideological and political teachers of the Basic Teaching Department to develop teaching content carriers that are easy to reflect the main line of ideological and political education and integrate into the elements of ideological and political education. The professional teachers make use of the quality evaluation platform developed for the development of students to enrich the evaluation means, the teachers in the student development center assist in the evaluation of the improvement of students' quality, and the teachers in the Youth League Committee provide the materials of the class and enrich the teaching resources.

Experts from outside the school mainly participate in teaching evaluation and hot topics in the tourism industry. Outside experts assist teachers in optimizing teaching evaluation standards based on the latest trends and needs of the tourism industry, which will be closer to actual work scenarios and help cultivate students' practical ability and professional quality. Industry experts participate in classroom teaching observation, and outside experts can intuitively understand students' learning situation and effects, and provide students with targeted feedback and suggestions. Outside experts can share the latest developments in the tourism industry, including changes in market demand, emerging tourism formats, and adjustments of policies and regulations. The information will help students understand the industry frontier and grasp the future direction of development. Given the hot issues emerging in the tourism industry, such as explaining service quality improvement, live tourism marketing, and so on, they will share their experience and lessons accumulated in practice to help students better adapt to changes in the industry. At the same time, experts from outside the school can interpret various standards and norms in the tourism industry, including service quality standards and qualification requirements for tourism practitioners. This will help students understand industry standards and improve their professionalism and competitiveness<sup>[14]</sup>.

## **5. Curriculum implementation: Carefully design and organize teaching implementation to achieve full coverage of ideological and political education in professional courses**

Curriculum implementation is the main way of the "five-dimensional integration" teaching path of curriculum ideological and political education. In the Voice of Revitalization: Rural theme tourism teaching module, adhere to moral cultivation, organic integration of curriculum ideology and politics, comprehensive advancement of

tour guide professional quality, gradually sublimation of the ideal feelings of tour guide, fully student-centered, realize the integration of intellectual, moral and strong skills of the education concept, forming the “four have three transmission” ideological and political main line.

Combined with the characteristics of the course “Rural Revitalization + Tourism Explanation”, according to the educational concept of combining knowledge and action, the teaching method of “task-driven, problem-oriented, situational practical operation and progressive writing” and the learning method of “independent exploration, group cooperation, games to promote ability, simulated competition, and discussion” are adopted.

In the process of completing the dual tasks, students can understand the background, significance, and goal of rural revitalization by writing tour words on the theme of rural revitalization, to stimulate a sense of identity and responsibility for rural tourism revitalization. Pay attention to the development of rural science and technology, rural cultural inheritance, rural intangible cultural heritage skills, rural ecological construction, and other knowledge, to enhance the sense of pride and mission of rural tourism explanation. Excavate and carry forward the connotation and value of rural tourism revitalization, to establish cultural confidence and craftsman spirit. In the process of explanation training, teachers create a suitable on-site environment for explanation, help students consciously integrate into the explanation practice, and give play to the hidden role of situation creation in ideological and political education. The practical practice of explaining the theme of rural revitalization tourism can well stimulate students’ potential and self-expression and also standardize students’ logic, expression, and explanation etiquette, and exercise students’ anti-pressure psychology. In the process of explaining training, students often gradually realize problems such as incorrect and empty explanation content, lack of vocabulary or difficulty in expression, and lack of strain ability caused by their lack of knowledge base and cultural heritage. Therefore, teachers can carry out the problem-oriented teaching method in time, which can fit the needs of students well, guide them to think and solve problems timely and cultivate students’ ability to think, analyze, and solve problems independently.

Independent inquiry can help students deeply digest theoretical knowledge, lay a foundation for subsequent practical links, and cultivate students’ thirst for knowledge. In group cooperation exercises, role-playing is adopted, allowing students to play the roles of interpreters and tourists to conduct simulated explanations and interactions. Role-playing can help students deal with temporary problems in the process of explanation and improve their adaptability. At the same time, through role-playing, students can better understand the needs and psychology of tourists and lay a foundation for providing personalized explanation services. Intensive practical exercises such as game promotion, simulated competition, and discussion can help students effectively master explanation norms, procedures, skills, and taboos, cultivate self-confidence, teamwork, and competition, and improve students’ practical ability and comprehensive quality.

## **6. Assessment and evaluation: Build a diversified evaluation system to reflect the effective evaluation of ideological and political education**

Assessment and evaluation are the test links of the “five-dimensional integration” teaching path of ideological and political education. In the teaching module of Revitalizing Voice: Rural Theme Tourism, a diversified evaluation system is constructed, and the process evaluation, result evaluation, value-added evaluation, and comprehensive evaluation are adopted to evaluate students’ learning attitude, learning process, learning results, self-ability improvement and comprehensive quality cultivation in an all-round and objective way.

The evaluation of students' participation in social practice, volunteer service, professional competition, service awareness improvement, and other obvious achievements of ideological and political education in the curriculum are included in the evaluation index, and the level of ideological and political accomplishment of students is evaluated by evaluating their performance in aspects of social responsibility, mission, and innovation<sup>[15]</sup>. The organic integration of ideological and political elements in assessment and evaluation can guide students to establish a correct world outlook, outlook on life and values, and cultivate students' cultural confidence, national pride, and feelings of home and country.

By discussing and analyzing the ideological and political path of "Explaining Skills", the core course of "Tourism Service and Management", this paper continuously digs into the ideological and political elements of tourism courses, uses the combination of explicit and implicit education, and strives to organically integrate the teaching of tourism majors into the main line of ideological and political education, to achieve the effect of educating the whole staff in an all-round way.

## Disclosure statement

The author declares no conflict of interest.

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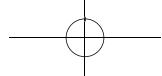
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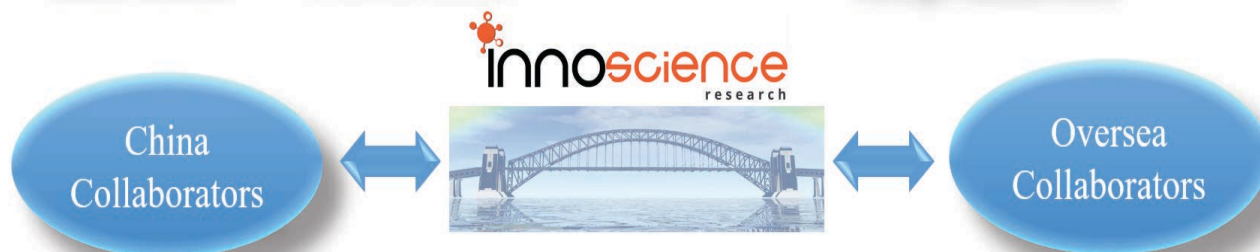
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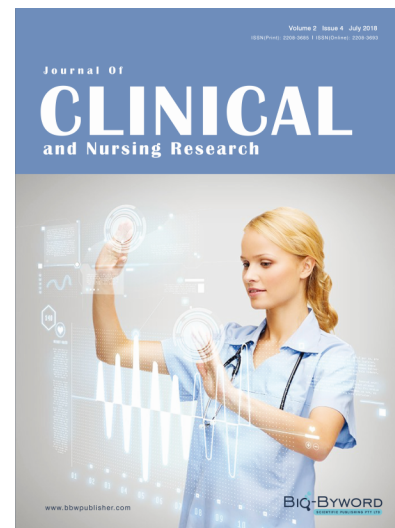
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