Contemporary Education Frontiers

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Analysis of the Overseas Online Communication Capacity of Chinese Universities and Development Strategies

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Abstract:

Against the backdrop of intensifying global competition and deepening exchange in higher education, enhancing overseas online communication capacity has become a crucial issue for Chinese universities seeking to advance internationalized education and build global brand images. Key factors determining the effectiveness of their overseas online presence include the degree of leadership emphasis, the establishment of specialized external communication posts with appropriate staffing, the effective operation of diverse overseas social media platforms, and sustained collaboration with international mainstream media. However, some universities still face challenges such as a shortage of qualified personnel, weak content innovation, and a lack of distinctive management strategies on overseas social platforms. In response, this paper proposes a series of measures: improving the "grand external communication" system and mechanism, deepening university–media cooperation, building integrated overseas media platforms, and strengthening cross-cultural communication capacity. These strategies offer feasible insights and operational references for Chinese universities to enhance their overseas online communication capacity and international influence in the new era.

Keywords:

Overseas
Online communication capacity
Strategies

1. Introduction

With the continuous advancement of the "Belt and Road" Initiative and the ongoing progress in the "Double First-Class" construction, the role of Chinese universities in the international academic arena and the global higher education system has become increasingly significant.

As global demand for higher education continues to rise, interactions among universities worldwide have intensified in international discourse, making it vital for Chinese universities to establish a uniquely Chinese "University discourse system" through international media and social platforms [1,2].

Universities, as key platforms for academic and cultural export, can significantly boost the global spread and recognition of Chinese culture if they can project a stronger "Chinese voice" across social and media networks worldwide. Objectively, however, the influence of Chinese universities in global public opinion and overseas online communication still needs substantial enhancement. On one hand, overseas audiences have only limited recognition of the educational philosophy, research strength, and social contributions of Chinese universities [3,4]. On the other hand, with the rapid growth of global new media and social platforms, finding ways to effectively leverage digital channels to convey universities' academic achievements, campus culture, and Chinese narratives to the international community remains a considerable challenge.

Overseas communication by universities not only demonstrates institutional images and academic progress but also constitutes a critical aspect of China's cultural soft power development in the field of education. Some universities with strong external communication capabilities have already begun actively using new media technologies and strategies to engage in cross-cultural, cross-platform international promotion, seeking to interact with global audiences on mainstream social platforms such as Facebook, X, YouTube, Instagram, and LinkedIn. Nevertheless, most existing discussions on university internationalization still focus on areas such as joint educational programs and international student enrollment, with comparatively less systematic research on overseas online communication capacity. Moreover, some universities continue to confront persistent issues in overseas online communication, including a shortage of specialized personnel, insufficient localized content, inadequate multilingual operation, and less-than-fully-developed top-level planning for external communication [5].

2. Current channels and operations of overseas communication by Chinese universities

2.1. Insufficient integration of social media platforms

Given the extensive influence and user base of overseas social media, particularly Facebook, X, Instagram, LinkedIn, and YouTube, many universities are gradually recognizing the importance of establishing official accounts on these platforms. Many leading institutions have obtained account verifications and carry out routine operations on several of these sites. Nonetheless, inadequate integration and interoperability among different social media platforms weaken the consistency and coverage of online communication.

2.2. Limited alignment between content quality and audience needs

In terms of overseas communication, some universities still rely on English-language institutional websites, promotional brochures, or short videos as the foundational means for international users, including overseas students, foreign faculty, and academic bodies, to learn about the institution. Yet, many universities neglect the need for multilingual coverage, rendering the information inaccessible to a wider international audience. Some universities exhibit low activity levels on overseas social media, with limited annual posting frequency, follower engagement, and quality of interactions. In addition, some content fails to reflect the interests and needs of overseas users, leading to suboptimal communication outcomes.

2.3. Inadequate resource investment

Many universities primarily depend on a few fixed social platforms without effectively utilizing additional channels such as international news websites or academic platforms. Insufficient budgets for international communication further constrain the availability of professional teams and technical support, undermining the professionalism and efficacy of external communication.

3. Strategies and approaches to enhance overseas online communication capacity in Chinese universities

3.1. Improve systems and mechanisms to establish a "Grand external communication" framework

3.1.1. Reinforce top-level design and coordination

Universities should emphasize the strategic importance of overseas communication by incorporating it into mid-

to long-term development plans and annual priorities. Concurrently, institutions should establish or expand external communication offices aligned with the scale of their international ambitions (setting up an overseas communication center under the Publicity Department) to ensure clear functions and responsibilities [6].

3.1.2. Establish departmental collaboration and resource-sharing

External communication often involves multiple departments (Publicity, International Cooperation, Research, and individual colleges). Without unified coordination, information silos or resource misallocation may arise. Universities can form leadership teams dedicated to external communication, hold regular joint meetings, and achieve unified planning, data sharing, and scheduling of communication initiatives [7]. A data-driven management platform can also be developed to monitor media coverage, overseas social media engagement metrics, and other indicators, thus providing scientific evidence for strategy adjustments.

3.2. Deepen university–media collaboration to produce high-quality external communication projects

3.2.1. Strengthen topic planning and narrate university stories effectively

Successful external communication hinges on the ability to present warm, in-depth, and readable content. Effective themes might include campus anniversaries, major research breakthroughs, international collaboration agreements, high-profile lectures, or outstanding alumni stories. By employing narrative techniques, contextual presentation, and digital visualization, such reports can be made more appealing and shareable [8,9].

3.2.2. Develop specialized cultural products and activities

Many universities focus on leveraging campus cultural elements to enhance external communication, such as creating cultural derivatives for external promotion. Through integrated online-offline activities like university history exhibitions, cultural festivals, or innovation and entrepreneurship competitions, universities can attract coverage by international media and participation by

faculty, students, and alumni, thereby boosting global visibility [10]

3.3. Diversify the use of new media platforms and strengthen integrated overseas media presence

3.3.1. Build a comprehensive overseas social media matrix for unified planning and multi-platform distribution

Considering the user base and communication potential of the five major global social platforms (Facebook, X, Instagram, LinkedIn, and YouTube), universities can strategically establish their presence on each platform in accordance with audience demographics and content attributes, maintaining consistent branding and visual design. Facebook emphasizes community interaction with alumni, faculty, students, and international partners, often featuring in-depth posts and external links. X is ideal for rapid dissemination of international academic events, major announcements, and topical commentary, with strategic use of hashtags boosting exposure. Instagram leverages high-quality images and short videos to present an appealing "visual aesthetic" of campus scenery, student life, and research achievements, drawing in younger international audiences. YouTube has an exceptional impact on video content in global outreach. Content may include recruitment videos, research documentary features, collections of renowned lectures, and other thematic varieties. LinkedIn focuses on promoting the university's disciplinary strengths, recruitment information, and industry partnership opportunities to align with professional and career-focused audiences.

3.3.2. Advance localized operations and follower engagement

Establishing an account alone does not guarantee meaningful influence in global discourse, success depends on localized content and consistent operations [11]. It is recommended to staff professionals who are familiar with overseas cultural contexts, proficient in foreign languages, and skilled in new media management. During content creation, attention should be paid to language style and cultural nuances, avoiding "Chinese English" which can hamper comprehension. Strategies to improve follower engagement might include designing interactive

topic campaigns, holding Q&A sessions, and targeted promotions, thus cultivating loyal fanbases and gradually expanding reach [12].

3.3.3. Collaborate with international mainstream media and industry platforms

This collaboration can build deeper partnerships demand planned, strategic efforts to cultivate strong overseas media relationships. For major events or high-impact research findings, institutions should proactively seek partnerships such as mainstream media, or global university ranking agencies and professional societies [13].

3.4. Strengthen workforce development to enhance cross-cultural communication and media management skills

3.4.1. Establish an overseas communication center or office

The creation of a dedicated "Overseas Communication Center or Office" is critical to advancing overseas online communication. Such an office can coordinate English-language news writing, promotional materials (brochures), the upkeep of the English version of the university website, new media account operations, and international alumni relations, ensuring systematic planning and implementation rather than disconnected efforts across different departments.

3.4.2. Enhance personnel training and multi-skilled competence

Personnel tasked with overseas communication require a solid understanding of international media landscapes and regulations, strong cross-cultural communication skills, and keen insight into global public opinion. Universities should provide regular high-level training programs, support international exchange and learning, and promote knowledge sharing with professionals from international

media outlets to continually upgrade the expertise of external communication teams [14].

3.4.3. Refine professional titles and performance evaluation systems

External communication roles integrate journalistic, branding, and cross-cultural management responsibilities, rather than being purely administrative or supplementary. Universities may explore incorporating "overseas communication proficiency" into promotion criteria, encouraging external communication staff to publish high-level articles in international journals or media outlets, participate in international conferences, and lead cross-cultural projects. By introducing more flexible evaluation metrics, these universities can motivate staff to be proactive and creative [15].

4. Conclusion

Given the intense competition and rapidly evolving public opinion landscape in international higher education, Chinese universities must confront the difficulties and challenges in overseas online communication to achieve broader global influence and a more active voice on the world stage. Moving forward, Chinese universities should bolster top-level planning, integrate internal resources, expand international publicity channels, and continually explore global communication strategies and cross-cultural engagement techniques. Only by adhering to a grand external communication perspective, emphasizing professional talent development and coordinated platform operations can universities build more internationally compelling images and contribute significantly to advancing the internationalization of China's higher education system and strengthening the nation's cultural soft power.

Disclosure statement

The author declares no conflict of interest.

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Research on the Collaborative Development Strategies of Artificial Intelligence Specialty and Information Technology Industry

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Abstract:

In today's digital wave, artificial intelligence shines like a brilliant star, illuminating the new path of technological development, while the information technology industry is the giant ship carrying it on its long voyage. As the global technological competition intensifies, the two are closely intertwined and have become the core engines driving social progress. On the one hand, artificial intelligence injects an intelligent soul into information technology and unlocks brand-new application scenarios; on the other hand, the information technology industry provides a solid foundation for artificial intelligence to land and nourishes its vigorous growth. In-depth exploration of the collaborative development path of the two is of great significance for China to seize the high ground of science and technology and drive the transformation of the industry.

Keywords:

Artificial intelligence specialty
Information technology industry
Collaborative development

1. Introduction

In the current era, artificial intelligence, as a strategic technology leading the scientific and technological revolution and industrial transformation, is rapidly permeating various fields. The information technology industry provides a basic support for it, and the trend of their collaborative development is significant. On the one hand, artificial intelligence has higher requirements for the information technology industry; on the other hand, the information technology industry also affects the growth of the artificial intelligence specialty [1]. In-depth research on the collaborative development strategies of the two is of great significance for enhancing China's scientific and technological competitiveness and optimizing the industrial structure.

2. Current development status of artificial intelligence specialty and information technology industry

2.1. Current status of artificial intelligence specialty

2.1.1. Specialty setting and curriculum system

In recent years, many universities have responded to the needs of the times and set up artificial intelligence specialties. Their specialty settings cover multiple core directions such as machine learning, computer vision, and natural language processing. The curriculum system has been gradually improved, ranging from basic mathematics and programming courses, such as Advanced Mathematics and Data Structures, to professional core courses such as Deep Learning and Reinforcement Learning [2]. However, different universities have differences in curriculum emphasis. Some universities focus on theoretical research, and practical courses are relatively weak, and the curriculum update speed is difficult to keep up with the rapid iteration of artificial intelligence technology [3].

2.1.2. Talent cultivation scale and quality

The scale of talent cultivation continues to expand, and a large number of undergraduate, masters and even doctoral graduates enter the market every year. However, in terms of quality, due to the rapid knowledge update and strong interdisciplinary nature in the field of artificial intelligence, graduates vary in the breadth and depth of knowledge reserve and practical hands-on ability [4]. Although some students have mastered theoretical knowledge, they lack the ability to effectively solve problems when facing complex practical projects, so it is difficult for them to quickly adapt to the technical research and application needs of enterprises.

2.2. Current status of the information technology industry

2.2.1. Industrial structure and development scale

The information technology industry has formed a diversified industrial structure covering hardware manufacturing, software development, and information services. In terms of scale, the total output value of China's information technology industry has been rising year by year, and several leading enterprises with international influence, such as Huawei, Tencent, and Alibaba, have emerged, achieving remarkable achievements in fields such as 5G communication, cloud computing, and big data and becoming an important force in the global development of the information technology industry [5].

2.2.2. Technological innovation and application fields

Continuous technological innovation is the driving force for the development of the information technology industry. From breakthroughs in chip manufacturing processes to the research and development of new algorithms, from the wide application of the Internet of Things in smart homes to the exploration and practice of blockchain in the financial field, information technology is constantly expanding new application boundaries [6]. Especially under the empowerment of artificial intelligence technology, emerging business forms such as intelligent manufacturing, intelligent medical care, and intelligent transportation are booming, reshaping the traditional industrial pattern.

3. Importance and existing problems of collaborative development

3.1. Importance of collaborative development

3.1.1. Promotion of industrial innovation and upgrading

The collaboration between artificial intelligence and the information technology industry can accelerate the integration and innovation of technologies. For example, artificial intelligence algorithms can optimize software performance and improve the efficiency of hardware chip design; information technology provides massive data storage and high-speed computing resources for artificial intelligence, making artificial intelligence model training more accurate and efficient [7]. The new technologies and products generated by the integration of the two, such as intelligent robots and intelligent security systems, can encourage the information technology industry to move towards high-end intelligence, and then realize industrial innovation and upgrading.

3.1.2. Promotion of the balance between talent supply and demand

Collaborative development promotes the close alignment

of talent cultivation with the actual needs of the industry. Enterprises participate in the process of university talent cultivation, and feedback on job skill requirements, and universities optimize courses and practical teaching accordingly to cultivate professional talents that are "marketable" [8]. While filling the talent gap in the industry and alleviating the contradiction of talent supply and demand imbalance, it also ensures human and intellectual support for the sustainable development of the industry.

3.2. Existing problems

3.2.1. Disconnection between talent cultivation and industrial needs

(1) Deviation between educational concepts and social needs

Traditional educational concepts focus on the imparting of theoretical knowledge and, to some extent, neglect the cultivation of practical abilities and the actual needs of the industry. The educational systems of universities are often built around the disciplinary knowledge system to construct courses, and they do not respond promptly enough to the rapidly changing technological and market demands in the industry, resulting in a disconnection between talent cultivation and the actual needs of the industry [9].

(2) Weak connection between universities and the industry

There is a lack of in-depth and effective communication and cooperation mechanisms between universities and enterprises. Most university teachers move from school to school and lack practical work experience in enterprises, so they have a limited understanding of the cutting-edge technologies and actual work processes in the industry and find it difficult to integrate the latest industrial needs into teaching content and practical teaching links. Meanwhile, enterprises are not highly motivated to participate in university talent cultivation, and their participation methods are relatively simple, mostly staying at the superficial form of providing internship positions and failing to deeply participate in the whole process of talent cultivation, resulting in a lack of an effective bridge for the docking between university talent cultivation and industrial needs [10].

(3) Solidification of talent cultivation programs and curriculum systems

Once the talent cultivation programs and curriculum systems of universities are determined, they tend to remain relatively stable for a long time and are difficult to adjust and update quickly according to industrial development. On the one hand, the management processes such as course approval are rather complicated, involving multiple departments and links, leading to the lag in curriculum content update; on the other hand, the investment and allocation of teaching resources have a certain stability and inertia and are difficult to quickly shift to emerging industrial technology fields, thus unable to meet the new requirements of the industry for the knowledge and skill structures of talents in a timely manner [11].

(4) Insufficient practical teaching resources

Practical teaching is an important link in cultivating students' industrial practical abilities, but universities often face the problem of insufficient practical teaching resources. The facilities and equipment for on-campus practical teaching are updated slowly and can hardly keep up with the update speed of industrial technologies; the number of off-campus internship and training bases is limited, and their qualities vary [12]. Moreover, considering factors such as their own production and operation, enterprises do not provide sufficient practical projects and guidance for students, resulting in students being unable to obtain enough exercise in the real industrial environment in practical teaching.

3.2.2. Imperfect industry-university-research cooperation mechanism

(1) Differences in value orientations and goals

There are differences in value orientations and goals among universities, enterprises and

research institutions in cooperation, which is one of the fundamental reasons for the imperfect industry-university-research cooperation mechanism. The main tasks of universities are talent cultivation and academic research, and their evaluation systems focus on the quantity and quality of academic achievements, such as paper publication and the establishment of scientific research projects. Enterprises aim to pursue market benefits, maximize profits and focus on the rapid application of technologies and the market competitiveness of products. Research institutions are more inclined to explore cutting-edge technologies, conduct basic research, and pursue academic breakthroughs and innovations. These goal differences make it difficult for all parties to form a unified interest appeal and action direction in cooperation, and it is easy to have differences and contradictions in the cooperation process, affecting the in-depth development of cooperation [13].

(2) Imperfect benefit distribution and risk-sharing mechanisms

In industry-university-research cooperation, benefit distribution and risk-sharing are key issues, but the relevant mechanisms are currently not perfect. Since it is difficult to accurately quantify and evaluate the input and contribution of all parties in cooperation, the benefit distribution lacks a fair and reasonable basis, which is likely to cause dissatisfaction and disputes among the cooperating parties. Meanwhile, for potential risks such as technological risks, market risks, and intellectual property risks that may arise in the cooperation process, there is a lack of clear sharing mechanisms. All parties are worried about bearing too much risk and affecting their interests, so they hesitate in cooperate and hinder the smooth progress of cooperation projects.

(3) Imperfect communication and coordination mechanisms

Industry-university-research cooperation involves multiple subjects with different natures and the communication and coordination among all parties are rather difficult. There are differences among universities, enterprises and research institutions in organizational culture, management mode and workflow, and there is a lack of effective communication channels and coordination mechanisms, resulting in poor information transmission and low cooperation efficiency. In the implementation process of cooperation projects, the communication and coordination costs among all parties are high, and misunderstandings and conflicts are easy to occur, affecting the progress and quality of cooperation [14].

3.2.3. Unreasonable policy support and resource allocation

Policies are not precise enough to guide the collaboration between the artificial intelligence specialty and the information technology industry, and some support policies are difficult to implement. In addition, in terms of resource allocation, funds, equipment, talents and other aspects are inclined to developed regions and leading enterprises. The industrial development of small, medium and micro enterprises and underdeveloped regions faces difficulties such as a shortage of funds and a lack of talents, which all limit the comprehensiveness and balance of collaborative development.

4. Solutions

4.1. Bridging the disconnection between talent cultivation and industrial needs

The renewal of educational concepts is the key starting point. Universities should abandon the excessive tendency towards theorization and build a curriculum system driven by both theory and practice. On the one hand, every year regularly invite senior technical experts from leading enterprises in the industry to enter the school, jointly discuss the course outlines with school teachers, and update the knowledge points of courses in real-time according to the current hot applications and cutting-edge algorithms in the artificial intelligence and information technology industries, and integrate case teaching. On the other hand, it can also organize teachers to participate in practical skill training to improve their practical teaching

abilities to ensure that knowledge imparting is not disconnected from reality.

At the same time, to strengthen the connection between schools and enterprises, universities need to formulate a long-term plan for teachers to take temporary positions in enterprises. Every year, 10–15% of teachers will be selected to go deep into counterpart enterprises and participate in the research and development of actual projects to accumulate first-hand experience. Enterprises should participate in talent cultivation in an all-round way, from providing practical cases for basic courses in the freshman year to truly doing real topics for graduation designs in the junior and senior years, deeply embedding in each link and customizing courses according to the job skill model to cultivate professional talents who can quickly get started and have great potential.

In addition, in optimizing the talent cultivation process, universities also need to carry out drastic reforms. Universities can also simplify the course approval process, set up a course update group composed of the Academic Affairs Office, departmental experts, and enterprise representatives, and quickly allocate teaching resources such as teachers and laboratories every semester according to information such as industrial technology reports and industry exhibition trends, give priority to green-lighting emerging technology courses such as artificial intelligence big data analysis and intelligent chip design to ensure that courses keep pace with the times. To address the shortage of practical teaching resources, universities and enterprises can jointly build an on-campus innovation practice center. Enterprises can introduce the latest equipment through donations, low-cost leasing and other means and simulate the real industrial scene. At the same time, expand the number of off-campus internship bases, select enterprises with strong technical strength and standardized management to assign one-on-one exclusive tutors for students, design practical projects around the core businesses of enterprises, and let students grow in practice [15].

4.2. Optimizing the industry-university-research cooperation mechanism

The government should take the lead actively and jointly organize universities, enterprises and research institutions to form a strategic alliance for industry-university-research cooperation, which is the core starting point for optimizing the cooperation mechanism. All parties gather together to deeply discuss the "bottleneck" problems in the industry. Taking the research and development of self-controlled chips in artificial intelligence as an example, universities, relying on their profound academic accumulation and scientific research talents, focus on theoretical breakthroughs and provide solid theoretical support for technological breakthroughs. Enterprises, taking advantage of their natural proximity to the market, not only bring valuable application scenarios but also invest sufficient research and development funds to help scientific research achievements enter the market. Research institutions focus on long-term development, concentrate on exploring cutting-edge technologies and pursue in-depth academic innovations. In this way, through close cooperation, the three parties fully take into account the demands for academic achievements, market benefits and technological innovations, laying a solid foundation for subsequent cooperation to ensure a consistent cooperation direction.

In view of the sensitivity and criticality of benefit distribution and risk-sharing in cooperation, it is urgent to introduce professional third-party assessment institutions. These institutions accurately quantify the input and output of all parties in cooperation projects from multiple dimensions such as the flow and proportion of funds, the degree of technological contribution and the input of manpower. Based on this accurate assessment, a fair and reasonable income distribution plan that convinces all parties is formulated, and the income is divided according to a clear proportion to ensure a reasonable income for all parties. Meanwhile, before the formal start of cooperation, all parties must sign a detailed and comprehensive risk-sharing contract, clearly defining the entities responsible for bearing various potential risks such as the failure risks that may be encountered in technological research and development, the obstruction risks in market promotion and the dispute risks caused by intellectual property rights. This can jointly set up a risk compensation fund, and share the risk costs according to the proportion of capital contributions to completely dispel the concerns of all parties in the cooperation process and safeguard the smooth progress of cooperation.

To achieve seamless docking and efficient

collaboration among industry, university and research, it is also necessary to build an integrated information interaction platform, which is the key foothold for improving communication and coordination. This platform is committed to integrating the relatively closed scientific research management systems of universities, the flexible project management processes of enterprises and the open and diverse academic exchange platforms of research institutions, and realizing powerful functions such as barrier-free instant messaging, convenient collaborative document editing and real-time visualization of project progress sharing through technological integration. Based on this, regularly hold industry-university-research cooperation exchange summits every quarter to carefully set up project roadshow links to allow the wonderful display of innovative projects of all parties. It also conducts special sessions for problem diagnosis to jointly overcome thorny problems in cooperation and organizes experience-sharing activities to promote mutual learning and reference of successful experiences. Through this series of closely linked measures, comprehensively enhance the mutual understanding among all parties, timely and effectively resolve the contradictions that may arise at any time in the cooperation process, continuously improve the smoothness and effectiveness of cooperation, and promote industry-university-research cooperation to a new height.

4.3. Improving the unreasonable situation of policy support and resource allocation

To achieve precise policy support, multiple departments need to work together. The science and technology department should jointly conduct in-depth investigations with industry associations on the development pain points and needs of artificial intelligence in subdivided fields such as medical care, manufacturing and finance, as well as in different regions such as the eastern coastal areas and the central and western regions. Based on this, differentiated and targeted support policies should also be formulated. For example, special subsidies for artificial intelligence empowering the upgrading of traditional manufacturing industries should be provided. On this basis, a policy implementation tracking and feedback mechanism should be established, regularly visit the beneficiaries, and adjust and optimize promptly according to the feedback to ensure that policies are effectively implemented.

In addition, to balance resource allocation, multiple measures are needed. On the one hand, the government is required to guide and jointly organize leading enterprises to contribute funds to set up special support funds for small, medium and micro enterprises. Every year, select the funded objects according to indicators such as enterprise research and development investment and innovation achievements to help with technological upgrading. On the other hand, a talent reverse flow plan should be carried out to provide high relocation allowances and preferential treatment for children's education for talents going to underdeveloped regions; give tax reductions and subsidies for priority project establishment to enterprises that introduce talents to guide funds, equipment, talents and other resources to move towards balanced development.

5. Conclusion

The collaborative development of the artificial intelligence specialty and the information technology industry is an important task entrusted by the times and the inevitable path to realizing a powerful country in science and technology and industrial revitalization. Although there are currently many problems, with the implementation of measures such as the renewal of university educational concepts, the strengthening of school-enterprise connections, the optimization of curriculum systems, the formation of strategic alliances for industry-university-research cooperation, the improvement of benefit and risk mechanisms, the building of communication platforms, as well as the precise policy support and balanced resource allocation, the two will surely break down barriers and integrate deeply.

Disclosure statement

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Research on the Integration Path of National Music in Primary and Secondary School Art Courses

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Abstract:

This study examines how national music is incorporated into art courses in primary and secondary schools. The study analyzes the main problems of current national music teaching such as the lack of systematic curriculum setting, insufficient innovation in teaching methods, and lagging behind in teacher team development. The integration of national music into primary and secondary school art courses has cultural inheritance value, aesthetic education value, and moral education value. The article proposes specific implementation paths from three dimensions: curriculum system optimization, teaching method innovation, and teacher team construction. Through systematic reform measures, the teaching effect of national music will be significantly improved, promoting the comprehensive development of students' cultural literacy, aesthetic ability, and moral sentiment.

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1. Introduction

With the development of the world's diversified trend, while we enjoy the richness of multicultural cultures, we should also see their impact on China's excellent traditional culture. The unique lifestyles, thinking characteristics, and emotional expressions of various ethnic groups are deeply reflected through music and art [1]. Quality education in the new era puts forward higher requirements for students' cultural literacy, aesthetic ability, innovative thinking, and the status of art education in talent training is becoming increasingly prominent [2]. My country's primary and secondary school art curriculum system urgently needs to deeply explore the educational value of national music and explore the organic integration of national music and modern art education [3]. The problems of single teaching content, outdated teaching methods, lack of teaching resources, and weak teaching staff in national music classroom teaching restrict the improvement of the teaching effect. Students' cognition of national music remains on the

surface, making it difficult to understand its deep cultural connotation [4]. This study focuses on the integration path of national music in primary and secondary school art courses, aiming to improve the effectiveness of national music teaching and promote the comprehensive development of students' artistic literacy.

2. Analysis of the current status of national music integration into primary and secondary school art courses

2.1. Lack of systematic curriculum setting

The proportion of national music works in the current primary and secondary school music textbooks is only about 15%, which is far lower than Western music works [5]. The selected national music works in the textbooks are primarily folk songs, with little inclusion of other musical forms such as instrumental music and opera [6]. Many representative national music works have not been included in the textbooks, which restricts students' systematic cognition of national music.

Teachers' knowledge reserves of national music are also insufficient. The survey shows that 76% of music teachers said that they did not have a deep understanding of national music and 58% of teachers believed that they lacked experience in teaching national music [7]. The limitation of teachers' professional ability affects the selection and arrangement of teaching content, making it difficult to ensure the quality of folk music teaching.

The content of folk music teaching in each grade is not closely connected, and the knowledge progression is not strong [8]. The objectives for teaching folk music are often unclear, and the assessment methods primarily focus on singing songs and memorizing music theory. This approach overlooks the evaluation of students' musical sensitivity, understanding, and expression. Additionally, having a single method of evaluation diminishes students' enthusiasm for learning.

2.2. Insufficient innovation in teaching methods

The indoctrination teaching method is prevalent in classroom teaching. Survey data show that 83% of teachers use one-way lectures in folk music classes. Students passively accept knowledge and lack opportunities for thinking and exploration [9]. Teachers overemphasize skill training and ignore students' emotional experience and understanding of music works.

The level of development and application of multimedia teaching resources is low. About 65% of teachers use multimedia teaching resources less than 5 times per semester. The number of high-quality folk music teaching resources on the Internet is limited and the teachers' access channels are not smooth [10]. Modern educational technology has failed to effectively serve folk music teaching.

There is also a significant shortage of practical teaching activities. Only 34% of schools regularly conduct national music practice activities, while 46% lack national musical instruments altogether [11]. Students lack the opportunity to operate national musical instruments and their perception of national music remains at the auditory level [12]. The integration of music teaching with other subjects is low and interdisciplinary teaching projects are rarely carried out.

2.3. The construction of the teaching staff is lagging behind

There is a significant shortage of professional music teachers. There is a shortage of 150,000 music teachers in primary and secondary schools across the country and the music teacher staffing rate in rural areas is less than 60% [13]. Full-time music teachers have too much workload, with an average of more than 24 teaching hours per week, making it difficult to devote sufficient time to teaching research.

The professional development mechanism for teachers is not perfect. A total of 72% of teachers participate in fewer than 20 hours of professional training each year. The training content is mainly based on Western music theory and the proportion of national music-related training is low [14]. Furthermore, the age structure of the teaching staff is unbalanced, with teachers over 50 years old accounting for 38% and young teachers under 35 years old accounting for only 15%. The scientific research ability of teachers needs to be strengthened urgently as the proportion of teachers who have published teaching and research papers in the past five years is less than 20%.

3. Analysis on the value of integrating ethnic music into the art curriculum of primary and secondary schools

3.1. Cultural inheritance value

The long-tune folk songs of the Mongolian people show the heroic and unrestrained character traits of the grassland people. The mountain songs of the Tibetan people convey the awe of the people of the plateau for nature. The tea-picking ballads of the Zhuang people depict the production and life scenes of the working people. The musical works of various ethnic groups preserve rich historical and cultural information through unique artistic forms.

Ethnic music contains the philosophical wisdom of the Chinese nation. The elephant-foot drum music of the Dai people expresses the ecological concept of harmonious coexistence between man and nature. The Dongba music of the Naxi people conveys the cosmological view of respecting heaven and ancestors. The twelve Muqams of the Uyghur people show the artistic pursuit of perfect harmony. Ethnic music helps students understand the spiritual core of Chinese traditional culture.

Opera art carries rich ethnic and cultural elements. The facial makeup art of Peking Opera shows the typical expression of Chinese characters. The water-grinding tune of Kunqu Opera reflects the delicate feelings of the literati in the south of the Yangtze River. The Banqiang system of Cantonese Opera reflects the regional characteristics of Lingnan culture. Opera music provides students with a vivid teaching material for understanding the folk culture of various places.

3.2. Aesthetic education value

The vocal system of national music has unique aesthetic characteristics. The Miao Feige uses a special falsetto singing method to create an ethereal and clear timbre effect. The Mongolian Humming technique creates a wonderful sound of multiple voices produced by one person at the same time. The Dabenqu of the Bai people in Dali, Yunnan is known for its sad and moving singing. The diverse singing methods expands the students' aesthetic experience of sound.

National instrumental works embody the diversified musical beauty. The pipa solo "Ten Sides of Ambush" depicts the war scene with rich playing techniques. The flute piece "Gusu Xing" depicts the Jiangnan water town with a gentle and melodious melody. The Guqin piece "Liu Shui" expresses the beauty of nature with a gurgling sound pattern. The artistic conception of instrumental works cultivates students' artistic imagination.

3.3. Moral education value

The spirit of patriotism surges in national music works. "Yellow River Cantata" praises the Chinese nation's spirit of resistance with magnificent momentum. "The Long March Suite" tells the revolutionary process through sincere musical language. "Singing the Motherland" expresses love for the motherland with majestic melodies. Musical works with patriotic themes inspire students' patriotism.

Musical works of ethnic minorities express the spirit of unity and friendship. The long drum music of the Korean ethnic group shows the joyful scene of national unity. The elephant-foot drum music of the Dai ethnic group conveys the good wishes of national harmony. The Dombra performance of the Kazakh ethnic group expresses the deep friendship of national unity. Musical works with the theme of national unity cultivate students' collectivism.

Children's folk songs can teach and convey moral concepts through entertainment. "The Little Cowherd" educates children on the virtues of diligence and simplicity. "Counting Ducks" cultivates children's love for animals. "The Little Girl Picking Mushrooms" inspires children's virtues of being helpful. Children's folk songs educate students in ideological and moral education in a vivid and interesting musical form.

4. Path design for integrating ethnic music into primary and secondary school art courses

4.1. Curriculum system optimization strategy

Schools need to formulate scientific ethnic music curriculum planning. In the primary school stage, children's folk songs and folk nursery rhymes are the main teaching content to cultivate students' interest in national music [15]. In the junior high school stage, the proportion of learning national instrumental music and opera music

should be increased to expand students' musical horizons. During the high school stage, the characteristics of the music culture of each ethnic group must be systematically studied to deepen the understanding of national music. The teaching content of different stages is progressive, reflecting the systematic nature of knowledge.

Textbook compilation should prioritize the inclusion of national music works. The selection of content must emphasize typicality and representativeness, featuring outstanding music from various ethnic groups. During the compilation process, national music experts should be consulted to ensure the scientific rigor of the work selection. The arrangement of the content should consider the age and cognitive development of students, making it easier for teachers to deliver effective lessons. Additionally, supporting audio-visual materials should highlight the unique performance characteristics of national music.

The teaching evaluation system requires comprehensive reform and innovation. The evaluation criteria should fully take into account the artistic characteristics of national music. Both process and final evaluations should be integrated, with a focus on tracking students' progress throughout their learning journey. A combination of self-assessment, peer evaluation, and teacher evaluation should be used to provide a well-rounded assessment of the lessons' effectiveness. The evaluation criteria should cover various aspects, including singing and playing skills, music perception, and cultural understanding. Additionally, assessment methods should be diverse, incorporating practical demonstrations, group reports, and project outcomes.

School-based curriculum development plays a crucial role in enriching teaching resources. Teachers create ethnic music courses that reflect the school's unique characteristics and meet the specific needs of students. By incorporating local ethnic music, they design teaching content that highlights regional features. Teachers also work together to compile school-specific textbooks and develop courseware. A school-based resource library is established to gather and organize exemplary teaching cases. In addition, schools engage in research to explore new directions for teaching reform.

4.2. Teaching method innovation strategy

Project-based learning method enhances student interest in learning. Teachers design ethnic music-themed projects that encourage students to engage in exploratory learning. Through group collaboration, students complete project tasks, fostering teamwork skills. The project content may include ethnic music research, concert planning and organization, as well as the creation and adaptation of musical works. The results are presented in formats such as concerts, research reports, and exhibitions of works. Teachers serve as guides throughout the project's implementation.

Digital teaching methods significantly enhance teaching effectiveness. Teachers can use virtual reality technology to create immersive ethnic music and cultural contexts. Digital audio processing software allows for detailed analysis of the characteristics of ethnic music works. Interactive multimedia courseware is developed to improve the visual and auditory experience of lessons. An online learning platform is established to broaden extracurricular learning opportunities. Micro-class videos are recorded to support independent student learning, while intelligent music software is used for creative training

Practical experience activities help deepen students' understanding of music. Students can visit the National Music Museum to explore the history of musical instrument development. Folk artists may be invited to campus to teach singing and playing skills. National music field trips are organized to collect and document folk music materials. Campus national music festivals are held to showcase students' learning outcomes. Students are encouraged to create simple national musical instruments, fostering hands-on skills. Regular concerts provide opportunities for students to practice stage performance.

Interdisciplinary integrated teaching broadens students' learning dimensions. By combining national music with history courses, students can gain a deeper understanding of the historical context of music. Integration with geography courses allows students to recognize the regional characteristics of music, while connecting with Chinese courses helps them appreciate the literary connotations of music. Collaboration with art courses provides an opportunity to explore the

visual elements of music, and integration with physical education courses supports music rhythm training. This multidisciplinary approach enhances students' comprehensive understanding of national music.

4.3. Teacher team-building strategy

Enhance the professional training system for teachers. Training in national music theory improves teachers' subject expertise, while performance skills in national musical instruments strengthen their practical teaching abilities. Training in teaching design enhances classroom effectiveness, and information technology training fosters innovation in teaching methods. Developing interdisciplinary teaching skills broadens teaching perspectives. Additionally, establishing teacher development files and creating personalized training plans will further support continuous professional growth.

Establish a mechanism to foster teachers' research capabilities. University experts should regularly guide teachers in conducting teaching research. The school can allocate special funds for teaching and research projects to support teachers' research activities. Teachers should be encouraged to participate in academic seminars to stay informed on the latest research trends. Promoting the writing of teaching papers and summarizing teaching experiences will further support their professional development. Research and evaluation activities should be organized to recognize outstanding achievements, with teachers' research outcomes linked to professional title evaluations to inspire greater research enthusiasm.

The implementation of a young teacher training plan is essential for their development. A mentorship system, where experienced teachers guide younger ones, helps them grow rapidly. Organizing teaching competitions provides a platform to showcase their talents, while opportunities to observe high-quality classes allow young teachers to learn from advanced practices. Basic teaching skills training enhances their professional literacy, and further study opportunities expand their development potential. Additionally, establishing growth files for young teachers enables the tracking of their progress and provides a clear path for their continued development.

Establish a platform for teacher exchange and collaboration. Regional teaching and research activities foster experience sharing among teachers, while an online teaching and research community provides a space for virtual communication. Cross-school teaching and research networks facilitate high-quality resource sharing. The renowned teacher studio serves as a model, guiding and inspiring others. The inter-school alliance project encourages the professional development of teachers. Additionally, a regional teaching and research database should be created to collect and preserve outstanding case resources.

Reform the teacher evaluation incentive system. The teacher evaluation standards highlight the contribution of teaching practice. The quality of classroom teaching is linked to performance appraisal. Set up teaching innovation awards to reward outstanding teachers. Improve the professional title review system and broaden the promotion channel. Set up a specialized teacher selection system to serve as a model for others. Formulate a teacher development evaluation plan to promote continuous progress.

Strengthen the development of teaching and research organizations. Subject-specific teaching and research groups should regularly engage in teaching and research activities, while interdisciplinary groups foster disciplinary integration and innovation. Recognizing and rewarding outstanding teaching and research groups will help stimulate team vitality. A well-designed activity plan for teaching and research groups ensures effective implementation. These groups should also showcase and exchange results to promote best practices and advanced experiences. Additionally, the teaching and research group work system should be improved, with a focus on standardizing organization and operation.

Optimize the allocation of teacher resources. Increase the staffing of music teachers in rural schools and establish a teacher exchange and rotation system between urban and rural areas. Regional high-quality teacher resources should be better coordinated and allocated. The management system for teacher appointments can be reformed to ensure fair compensation for teachers. It would be beneficial to improve the teacher exit mechanism to optimize the team structure. Additionally, expanding channels for teacher recruitment would help reserve talented individuals.

5. Conclusion

Through the optimization of the national music curriculum system, innovation of teaching methods, and construction of the teaching staff, the teaching effect of national music in the art courses of primary and secondary schools will significantly improve. Students' cultural literacy, aesthetic ability, and moral sentiment will also fully develop. The reform and innovation of national music education require educators to continue to explore and practice.

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The Integration of People-oriented Concept in University Education Management

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Abstract:

With the continuous advancement of China's education reform, college education management is also paying more and more attention to the development of students' personalities, attaching importance to training students' ability to find problems, analyze problems, and solve problems, constantly improving students' self-management ability, and cultivating outstanding talents with high comprehensive quality and strong professional ability. The concept of people-oriented education emphasizes respect for students' differences, seeing each student's advantages, developing each student's potential, and ultimately promoting their all-round development. This paper discusses the significance of integrating the people-oriented concept into the educational management of colleges and universities, reviews the practical needs and principles of integrating the people-oriented concept into the educational management of colleges and universities, and puts forward specific integration strategies.

Keywords:

Universities
Educational management
People-oriented
Fusion of ideas

1. The significance of integrating the people-oriented concept into the university education management

(1) Being people-oriented is an essential requirement of higher education management

The traditional education concept has a profound influence on the concept of university education management. Whether it is classroom teaching or student management, students are in a passive position, which limits the development of their innovative thinking and independent ability. In the context of quality-oriented education reform, the people-oriented management concept fully respects the principal role of students. Both teaching methods and management activities are based on the actual needs of students, giving students sufficient space for development, and comprehensively improving their comprehensive

quality and professional ability [1].

(2) People-oriented is the realistic demand of constructing a harmonious campus

College students are active, innovative, brave to accept new things and new ideas, and have a strong sense of self. Therefore, colleges and universities should innovate the traditional management mode, actively reform, and optimize the concept of education management, focus on the actual demands of students, build a good relationship between teachers and students and a harmonious campus culture, and achieve long-term and stable development of colleges and universities.

(3) People-oriented is an important prerequisite for the harmonious development of society

"Strong country with talents" is an important strategic goal of China, talents are to improve China's competitive advantage in the international community, and universities are at the forefront of training outstanding talents. Therefore, adhering to the people-oriented management concept, fully respecting the basic law of talent development, promoting the all-round development of students, and training high-quality talents are important aspects of colleges and universities to make contributions to the social development of the country [2].

2. The practical needs of university education management integration of people-oriented concept

College education management is an important means to ensure the quality of talent training and realize the sustainable development of colleges and universities. However, under the actual situation, there is still much room for improvement in the specific management work, and there is a natural and realistic demand for integrating the people-oriented management concept, which is mainly reflected in the following aspects:

(1) The consciousness of people-oriented in the educational management of some colleges and universities is relatively weak

Although it is of great significance to integrate the concept of people-oriented into the educational management of colleges and universities, there are still quite a few colleges and universities that are unable to realize the necessity of people-oriented. For example, they pay too much attention to the implementation of teachers' teaching plans and ignore the actual needs of students. Teachers blindly pursue teaching progress, ignoring students' basic abilities and so on. This management mode puts students in a passive position, weakens their learning initiative and enthusiasm, and is not conducive to the improvement of students' independent exploration ability and innovation abilities.

(2) The people-oriented concept is not fully integrated into the educational management system of colleges and universities [3]

The people-oriented concept is related to the quality and sustainable development of university education management. Integrating the people-oriented concept can create a harmonious and democratic atmosphere for talent training. However, at present, in some college education management work, the integration of the people-oriented concept is still superficial. Neither the specific education management system nor the daily education management work can meet the personalized development needs of students, which is not conducive to the improvement of students' innovative and practical abilities. The current educational management system is dominated by "task," and little communication and insufficient information is shared among various functional departments in the school, which fails to meet the actual needs of students with active thoughts efficiently and with high quality.

(3) The comprehensive quality of educational administrators still has a large room for improvement

The comprehensive quality and professional skills of educational administrators themselves will have a direct impact on the effect of educational management, and the comprehensive

quality of educational administrators includes ideological cognition, management ability, basic cognition of education, teaching ability, etc. Although some educational administrators in colleges and universities have excellent teaching ability and management ability, their concepts of educational management are still relatively backward. Educators unable to deeply understand the significance of the people-oriented concept, unable to better adapt to the current humanistic education management mode of colleges and universities, which directly affects the educational management effect of schools [4].

3. The principle of integrating the people-oriented concept into the educational management of colleges and universities

To integrate the people-oriented concept into the university education management work, we need to follow the following principles:

(1) The guiding principle

The so-called guiding principle refers to the cultivation of students' independent learning ability, self-management ability, and social adaptability. The people-oriented concept should be integrated into the educational management work to truly think about their actual needs from the perspective of students, fully respect the principal position of students, guide and motivate students to actively explore knowledge, and cultivate good independent thinking habits. Educators need to improve their autonomous learning ability, under the guidance of the people-oriented management concept, educational administrators can provide students with correct moral, life values and world outlook, and guide students to correct life attitude, including learning attitude and academic attitude. Teachers help students develop reasonable study plans, improve their time management ability, and better cope with study pressure and life problems [5].

(2) The principle of difference

The so-called difference principle is to provide students with more targeted education management services based on their characteristics and actual conditions, which is essentially the embodiment of respect for students' differences. College students have great differences in knowledge level, learning ability, interests, and hobbies. College education administrators follow the principle of diversity and face different students with different learning styles and ways of thinking, which can help them better understand the needs of each student, formulate personalized education management strategies according to their learning needs, and stimulate their learning enthusiasm. Daily education management adopts a hierarchical management mode to provide appropriate educational resource support for students at each level, pay attention to students' personality development and ideological problems, and help each student to better develop their ability and value, improve their comprehensive quality and learning initiative.

(3) The principle of subjectivity is also the core principle of integrating the people-oriented concept into the education management of colleges and universities

Only by stimulating the drive of students can they improve their learning enthusiasm and initiative, and regard students as independent subjects, and fully respect their choices and decisions. Respect for students is an effective means to stimulate their drive. College students are already adults who can assume corresponding responsibilities and college education administrators should provide students with sufficient autonomy to choose. Under the guidance of the principle of subjectivity, the educational management mode of colleges and universities should be more flexible and open, weaken the characteristics of coercion, discipline and constraint in the concept of "management," and give students more freedom of expression and creation. With that students can improve their enthusiasm to participate in learning and

promote their independent development [6].

4. The strategy of integrating the people-oriented concept into the educational management of colleges and universities

In the university education management work, educators can integrate the people-oriented concept from the following aspects to improve the quality of education management work.

4.1. Respect students' subjectivity and integrate the people-oriented concept into daily work

College education administrators should integrate the concept of people-oriented into daily work, fully respect the main role of students in study and life, face up to the differences among students, and see the needs of individual students and groups. Specific work needs to pay attention to the following aspects:

(1) The university education management personnel should change the concept, change the way of work and work attitude

Educational administrators should return the management rights of students to students and improve students' self-management ability. For example, in terms of professional principles, colleges and universities try to reduce the restrictions on changing majors and give students more opportunities to choose professional courses according to their interests [7]. The corresponding professional courses can also be set up for students to choose, establish a mutual selection mechanism among course teachers, professional courses and students, so that students can independently choose their favorite professional courses and teachers, and college education administrators guide students to make reasonable choices without affecting others and normal professional learning to create a more free and relaxed learning atmosphere for students.

(2) The principle that students are the first subject is always adhered to in the teaching process

Professional teachers and counselors can actively communicate with students after class to understand their difficulties in learning and help them solve the puzzles in life [8]. Professional education in the classroom should increase the question-answering link, encourage students to take the initiative to ask questions and cultivate their ability to use professional knowledge flexibly. Try to implement the flipped classroom model, that is, students as the "presenter," teachers as the "collaborators," students as the "presenter" must find relevant materials, plan specific learning content, and organize classmates to learn and communicate. The exchange of roles between teachers and students in the whole process not only reflects the core position of students in learning, but also provides teachers with timely feedback on the problems existing in the learning process of students, and improves the pertinence of teaching management.

(3) The evaluation method is optimized under the guidance of a people-oriented concept

The traditional education management mode emphasizes "management," and students have been in a passive position. After integrating the people-oriented management concept, the standardization and humanization of various management work can be improved [9]. Through the organic integration of rigid management and flexible management, a balance point can be found between the standardization of management and the freedom of students. In practice, colleges and universities can optimize the traditional evaluation method under the guidance of the people-oriented concept, integrate the content emphasizing the comprehensive quality and personality development of students into the evaluation index, and pay attention to the evaluation of the service consciousness and serviceability of teaching management personnel. The scientific evaluation system makes the educational administrators not only pay attention to the teaching methods, but also pay full attention to the development of students' personalities, and cultivate their independent thinking ability and self-management ability.

4.2. Strengthen the professional construction of the educational management team

Education management not only requires college administrators, teachers, and counselors to have professional teaching ability, but also have certain management ability, which requires higher comprehensive quality of education administrators. In order to integrate the people-oriented management concept into education management, it is necessary to further strengthen the professional construction of the entire team. Build an educational management team that meets the requirements of education and teaching reform. Specifically, it can be carried out from the following aspects:

(1) Improve the personnel allocation of educational management posts in colleges and universities

In traditional education management, there are many problems such as one person having multiple posts, unclear responsibilities, and unclear powers and responsibilities, which makes it difficult to trace the responsible person after the problem occurs. Moreover, frequent job changes will also affect the enthusiasm of educational administrators. Therefore, colleges and universities should reasonably arrange the allocation of educational management positions according to the job demand and the actual ability of talents, and absorb outstanding talents in combination with the actual situation to realize the realization of dedicated personnel [10].

(2) Establish a long-term training mechanism for educational managers

Education management in colleges and universities is always in a state of dynamic development, and education administrators should keep pace with the era and keep learning to better adapt to the needs of practical work. Colleges and universities should pay attention to the training and education of educational administrators, conduct different professional knowledge training for different management positions, especially strengthen the training of management professional knowledge, improve the management professional level of teachers and counselors, and apply humanized modern management theory to daily work.

4.3. Build a good educational management environment under the guidance of the people-oriented concept

The influence of the environment on people is profound and imperceptible. The effect of recessive education can be strengthened by integrating the people-oriented concept into the educational management of colleges and universities [11–13]. Therefore, colleges and universities should build a good educational management environment under the guidance of the people-oriented concept. On the one hand, build a good campus culture. Campus culture is the embodiment of the values observed by the majority of teachers and students in a university. A good campus culture can drive students to take the initiative to restrain their behavior, form a benign learning habit and a positive attitude toward life under the influence of a benign and positive environment, and enable students to consciously grow and become talents under the driving force, further improving the effectiveness of education management. In the specific work, educators can use important holidays to publicize the school motto, dig into the development history of the school, and extract the humanistic tradition contained in the campus history, so that students can feel the humanistic thoughts and humanistic care in the campus culture. Universities regularly invite experts and scholars to the university to carry out lectures on different topics, such as theme reading salons, humanistic quality-related lectures, special quality exchanges, etc. We can also hold theme essay contests, speech contests, debate contests, and painting and calligraphy competitions in schools, which not only enrich students' extracurricular activities, but also cultivate students' innovative and creative ability [14,15].

5. Conclusion

In short, integrating the people-oriented concept into college education management can stimulate the enthusiasm of education management workers, create a good campus culture, stimulate students' enthusiasm for learning, correct students' attitude to life, further improve the quality of college education management, and cultivate more outstanding talents for society and enterprises.

Disclosure statement

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Investigation on Mental Health Status and Intervention Strategy of College Students with High Autism Trait in Jilin Province

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Abstract:

In the current era, college students are the core force to promote the future progress of the country, and their mental health problems are increasingly concerned by all walks of life. With the extensive coverage of higher education, the scale of college students continues to expand, and the members' backgrounds are becoming more diverse. In this group, college students with high autism characteristics constitute a special subgroup, and they show significant characteristics different from ordinary people in interpersonal communication, information communication, interest and behavior. This paper analyzes the investigation methods and psychological status of college students with high autism traits in Jilin Province, and explores effective intervention strategies from various aspects.

1. Introduction

In recent years, the research of college students' mental health problems has been deepening, and various psychological troubles have gradually emerged. Among the factors that affect the mental health of college students, the role of individual characteristics should not be underestimated. College students with high autism traits show unique characteristics in cognitive pattern, emotional expression and social interaction. The educational environment and regional cultural characteristics of colleges and universities in Jilin Province provide abundant samples and unique research background for the study of the mental health status of college students with high autism characteristics. There are differences in cultural heritage, educational methods and social assistance systems in different regions. How these elements interweave with high autism traits and then affect the mental health of college students is a research topic that needs in-depth analysis.

2. Investigation method analysis of mental health status of college students with high autism traits in Jilin Province

2.1. Survey respondents

Jilin Province has many colleges and universities, and the student population is large and diverse. The regional distribution, level differences and subject types of colleges and universities in the province should be considered comprehensively when selecting survey objects. Regionally, universities in Changchun and Jilin, which are rich in educational resources, and Baicheng and Songyuan, which are relatively weak in educational resources, should be covered to balance the impact of regional differences [1]. At the university level, it is necessary to include key universities such as 985 and 211, as well as general undergraduate and junior colleges, because colleges and universities at different levels have differences in educational concepts, training models, campus atmosphere and other aspects, which may have different impacts on students' mental health. In terms of subject type, it should cover comprehensive universities, science and technology colleges, normal colleges, medical colleges, etc. Students' professional backgrounds, academic pressure and career planning are different, which will also affect their mental health status. Through comprehensive and detailed sampling, it is ensured that the survey objects can fully represent the college students with high autism characteristics in Jilin Province, which provides a solid foundation for the universality and accuracy of the survey results.

2.2. Survey tools

Scientific and effective survey tools are the key to ensuring data quality. Aiming at the mental health status of college students with high autistic traits, which is the focus of this study, the study selected a variety of professional scales with good reliability and validity. Specifically, the Revised Autism Rating Scale for Children (CARS-R) was used to quantify the autistic traits of students, which covers multiple dimensions such as social interaction, language and repetitive behavior, and comprehensively reflects the autistic level of students [2]. At the same time, the SCL-90 was introduced, which included nine factors such as somatization, compulsion and interpersonal sensitivity to evaluate students' psychological symptoms in multiple

dimensions. In addition, the questionnaire of college students' mental health, which is designed for college students, involves learning, life, emotion and other aspects, is more suitable for college students' reality, and provides rich data support for comprehensive analysis of the mental health of college students with high autism characteristics.

2.3. Investigation process

Standardized and rigorous investigation process is the key to ensure the quality of investigation. Before the survey, systematic training was conducted for the personnel to ensure that they were familiar with the survey tools, scoring criteria and precautions, and to ensure the accuracy and consistency of data collection. The investigation follows the principle of voluntary confidentiality, and the purpose, significance and confidentiality measures of the investigation are explained to students in advance to eliminate concerns and enhance participation [3]. First of all, a questionnaire was issued on an online platform for preliminary screening to quickly identify students with high autistic trait tendencies. Subsequently, an in-depth offline survey was conducted on the screened students, combined with face-to-face interviews and paper questionnaires to collect more detailed information. Interviews are conducted by professional trainers in accordance with standardized procedures to ensure that the content is complete and effective. After the questionnaires were collected, they were strictly cleared and examined, invalid questionnaires were eliminated, and valid data were input and analyzed by statistical software. Through descriptive statistics, correlation analysis, difference test and other methods, the data information was deeply mined to draw scientific conclusions on the mental health status of college students with high autism characteristics in Jilin Province.

3. Analysis of mental health status of college students with high autistic traits in Jilin Province

3.1. Types of common psychological problems

When studying the mental health status of college students with high autistic traits in Jilin Province, the study must pay attention to the common psychological

problems they encounter. This special group is more likely to face a series of unique psychological difficulties due to its uniqueness in social communication, speech expression and behavior[4].

(1) Social phobia

In a crowd gathering or active communication situation, they may feel extremely uneasy and worry that their words and actions will not be accepted or understood by others. This constant worry and fear takes a heavy toll on their social engagement and quality of life. Social fear not only shrinks their social circle, but may also trigger self-isolation, which can further worsen mental health.

(2) Depressed mood

Individuals with high autism traits may gradually develop pessimistic and negative emotions due to difficulties in integrating into the mainstream of society, frequent misunderstandings or rejection. They may have doubts about their abilities and worth, and lose confidence and expectations for the future. This persistent depressive mood not only affects their academic performance but also may induce more serious psychological disorders.

In addition, college students with high autism traits may also suffer from psychological problems such as obsessive-compulsive disorder and lack of attention. Obsessive-compulsive disorder (OCD) is characterized by repeated compulsive thinking and behavior, such as excessive cleaning and repeated verification. Although these behaviors can alleviate their anxiety to a certain extent, in the long run, they will seriously disrupt their daily life and study order.

3.2. Analysis of influencing factors

The mental health status of college students with high autism traits is influenced by multiple factors. As far as the family environment is concerned, the early family education model and family atmosphere play a crucial role in the psychological growth of individuals. If parents adopt overly strict or overly protective parenting styles, and there is a lack of effective emotional communication and guidance in the family, the cultivation of children's social skills and emotional expression ability may be inhibited, resulting in children showing a tendency to withdraw and close in the face of the external environment[5].

The school environment also plays an important

role. The rich and colorful social activities and collective life in college pose a severe challenge to students with high autism characteristics. The fast pace of learning on campus and the intricate network of interpersonal relationships make it difficult for them to adapt quickly, which leads to psychological pressure.

Social and cultural environment is also a factor that cannot be ignored. At present, society generally praises good interpersonal skills and extroversion personality, which makes college students with high autism characteristics easy to be at a disadvantage in the social evaluation system. This gap between social expectation and reality further aggravates their psychological burden.

In addition, the individual's physiological and psychological characteristics are also the key factors affecting mental health. College students with high autism traits are more likely to have psychological problems in response to external stimuli because of their unique cognitive, emotional and behavioral patterns. Their relatively weak ability to self-regulate, to some extent, exacerbates the severity of mental health problems[6].

4. Intervention strategies for the mental health status of college students with high autism traits in Jilin Province

4.1. Construct a multi-dimensional accurate psychological education system to strengthen the effectiveness of cognitive remodeling and emotional regulation

Under the macro environment of continuous innovation of educational concepts and increasing social attention to mental health, the mental health status of college students has become the focus of social attention. For college students with high autistic traits in Jilin Province, it is particularly important and urgent to build a comprehensive and accurate mental health education system given their special obstacles in cognitive function, emotional expression and social interaction[7].

Therefore, in the course design, the study actively absorbs the theoretical essence of positive psychology on cultivating positive thinking and enhancing mental toughness, as well as the technical means of identifying and transforming negative thinking patterns in cognitive behavioral therapy, and carefully compiles psychological

education textbooks specifically for college students with high autism characteristics. For example, the self-cognition course is designed as a series of modules step by step, starting with the understanding of one's physical characteristics, interests, and hobbies, and gradually in-depth analysis of personal thinking mode, emotional response mode, and other deeper content. In the implementation of the emotion awareness course, by introducing real life scene cases, students are guided to deeply analyze the root causes of emotion in different situations.

In addition, the construction of an online education platform is also crucial. The study uses big data analysis technology to accurately push personalized course content for each student according to the psychological assessment results of students at the time of admission. Specifically, for students with low scores in the dimension of emotion management, the system will automatically push a learning package containing rich resources such as emotional recognition games and short videos explaining emotional regulation skills. For students with cognitive deviation, educators provide targeted logical thinking training courses and cognitive reconstruction exercises. At the same time, educators also regularly invite well-known psychologists to give live online lectures to share the latest research results. In addition, educators invite people with high autism traits who have successfully integrated into society to share their growth stories and ways to cope with challenges through video connection, encouraging students to draw strength from their role models, and gradually realize cognitive reconstruction and comprehensive improvement of emotional regulation ability.

4.2. Integrate interdisciplinary and multiple psychological intervention resources to achieve personalized deep psychological support matching

With the deepening of mental health research, people are increasingly aware that psychological interventions from a single disciplinary perspective are difficult to fully meet the complex and diverse needs of college students with high autism traits. Therefore, colleges and universities in Jilin Province should actively integrate resources from multiple disciplines and strive to build a comprehensive and multifaceted psychological intervention system [8].

Specifically, professionals from multiple disciplines, such as psychology, education, sociology, and medicine, should be brought together to form an interdisciplinary integrated intervention team. Among them, psychological professionals are responsible for conducting psychological assessments and developing personalized treatment plans. Education professionals provide students with necessary support from the perspective of educational methods and learning strategies. Sociology professionals are concerned about students' adaptation to social roles and the establishment of social relationships. Medical professionals, on the other hand, provide professional advice on medication and guidance on physical health when necessary.

In the development of personalized intervention programs, it is necessary to comprehensively collect students' psychological assessment data, family growth background, personal interests and other information. For students with musical talent, music therapy can be introduced. Professional music therapists carefully select suitable music tracks according to students' mental state and emotional problems and guide students to express their inner emotions through listening, humming, playing Musical Instruments, etc., to adjust their mental state. For students who love sports, sports therapists can tailor sports programs for them, such as encouraging them to participate in jogging, basketball and other team sports, and cultivate students' teamwork spirit and social interaction ability during sports to enhance their self-efficacy.

At the same time, universities should also actively expand external resources, and work with the community to carry out integration activities, such as organizing students to participate in community environmental protection publicity, caring for lonely elderly and other volunteer service activities, so that students can exercise social skills in real social scenes. In addition, colleges should also cooperate with enterprises to carry out career experience activities to help students better understand the workplace environment and career requirements, and fully prepare for future employment to achieve accurate docking of personalized deep psychological support.

4.3. Plan immersive social integration practice

projects to stimulate interpersonal interaction and advance social skills

The lack of social ability is one of the main obstacles for college students with high autism traits to integrate into society and promote the development of mental health. In order to effectively improve their social ability, it is particularly important to plan and implement immersive social integration practice projects to provide them with real and diversified social scenes [9].

As an important platform, colleges and universities should set up social practice societies for students with high autism characteristics. Taking the Handmade Creative Club as an example, it can regularly hold various kinds of handmade activities, such as pottery production, weaving technology, paper carving art, etc. Before the event starts, the organizers should be briefed on social etiquette, such as how to greet people politely and how to listen effectively to others. In the process of the activity, group cooperation is set up. For example, the group members are required to specify the division of labor, some are responsible for design conception, some are responsible for shaping, and some are responsible for coloring and decoration, to promote communication and interaction among members through cooperation.

In addition, cross-school social activities should be actively expanded. Educators can join hands with other universities to organize cultural festivals, and invite students' associations with high autism characteristics to participate in programs, cultural exhibitions, and other activities. During the preparation and presentation process, students need to communicate and collaborate with classmates from different schools to broaden their social range. At the same time, colleges cooperate with social organizations to carry out charity sale activities, so that students are responsible for the display, sales, and publicity of goods, and have direct communication with the public, to exercise practical social skills, gradually enhance interpersonal interaction, and realize the improvement and advancement of social skills.

4.4. Develop dynamic and hierarchical psychological rehabilitation programs to promote the continuous and steady improvement of mental health

The psychological problems of college students with high autism traits show significant individual differences and dynamic changes. Therefore, it is of great importance to develop a dynamic hierarchical psychological rehabilitation program to achieve accurate intervention and effectively improve their mental health level. Therefore, students should be divided into three levels of mild, moderate and severe according to the results of the psychological assessment, the severity of psychological problems and the stage of development [10].

For students with mild psychological problems, a variety of self-service psychological counseling resources should be provided. The school mental health education website should set up an independent curriculum area, covering emotional regulation, stress management, interpersonal relationship building and other courses for students to choose to learn. At the same time, the psychological counseling manual is compiled and issued, which covers psychological adjustment skills, analysis of common psychological problems, etc., so that students can refer to it at any time.

For students with moderate psychological problems, professional psychological counselors should be arranged for regular one-on-one consultations, at least once a week, and each consultation should last no less than 50 minutes. In the process of counseling, cognitive behavior therapy, humanistic therapy and other psychological treatment methods should be flexibly adopted according to the specific situation of students. In addition, group psychological counseling activities should be organized, each group of 8 to 10 people, once a week, through thematic discussions, role-playing, team games and other forms to promote communication and interaction between students, to promote psychological growth in the group atmosphere.

For students with severe psychological problems, a consultation team composed of multidisciplinary experts such as psychologists, psychiatrists, and education experts is required to jointly develop a personalized deep intervention plan. The program may cover a combination of drug therapy and psychotherapy, such as prescribing appropriate psychotropic drugs according to the diagnosis of a psychiatrist, and cooperating with a psychotherapist to conduct systematic psychotherapy. At the same time, a strict tracking and observation mechanism should be established to record students' mental state and behavior

every day, and a team discussion should be held once a week to timely adjust the intervention plan according to the rehabilitation of students, so as to ensure that students' mental health can be continuously and steadily improved.

5. Conclusion

The research on the mental health status of college students with high autistic traits in Jilin Province is an important reflection of the society's in-depth exploration of college students' group care and education. Based on regional characteristics and comprehensive consideration of multi-dimensional factors, this study is committed to providing practical and effective psychological support for college students with high autism characteristics. From the elaborate design of investigation methods to the in-depth analysis of mental health status, to the multiple construction of intervention strategies, it is not only a help for this special group, but also a positive practice of the collaborative development of education and psychology, providing a scientific paradigm for mental health education in colleges and universities, promoting the continuous progress of social care for special groups, and helping them integrate into society. Realize the harmonious coexistence of individual value and society.

Disclosure statement

The authors declare no conflict of interest.

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AI-Driven E-commerce Models for Career Planning Tool Enterprises: Innovations and Market Opportunities

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Abstract:

The convergence of artificial intelligence (AI) and e-commerce is driving the growth of career planning tool companies, opening up new business models and market opportunities. This paper focuses on how AI can enable business model innovation in career planning tool companies and reveals its market opportunities and operational advantages. Through AI applications such as personalized recommendations, intelligent customer service, and data-driven business decisions, enterprises enhance the user experience and create new market space. This article also analyzes the challenges of AI-driven models, such as data privacy and technology dependence, and looks at the future direction.

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1. Introduction

In the context of transforming the global digital economy, career planning companies actively pay attention to external challenges and challenges. Career planning, as an important tool to help individuals formulate career goals and development paths, has gradually shifted from the traditional offline consulting mode to the online one in recent years. With the rapid development of e-commerce, career planning tool enterprises have realized the business model innovation of precise service and catering through digital platforms, and successfully reached a wider range of target groups [1].

The introduction of AI technology has further accelerated change. Through technologies such as big data, machine learning, and natural language processing (NLP), career planning tool companies can dig deeply into users' career trends and behavior patterns and provide highly personalized career development suggestions. This technology-driven business model not only improves user experience but also significantly reduces the operating costs of enterprises [2]. In addition, by enhancing decision-making ability and optimizing marketing strategies, AI technology enables enterprises to respond quickly to market demands and stimulate opportunities in global

competition [3].

However, combining AI and e-commerce also brings new issues, such as data privacy and technology dependency challenges, which need to be highly valued by enterprises in the development process. The purpose of this article is to explore how AI-driven career planning tools companies can innovate their business models through e-commerce, seize market opportunities, and solve technological and market challenges in transformation.

2. AI drives the innovation of e-commerce model

2.1. Personalized recommendation and user experience optimization

Personalized recommendation is one of the core applications of AI in the career planning tool enterprise. The technology dynamically adjusts the service content of the platform by analyzing the user's career assessment data, behavior habits and personality characteristics. For example, a career planning platform recommends suitable career courses, certification programs and online training resources based on the results of users' career interest and skill tests [4]. This not only helps users to clarify their career goals but also significantly improves the effectiveness of the service.

In addition, personalized recommendations also extend to the field of precision marketing. AI systems use machine learning algorithms to predict user needs and personalize content at the right time. For example, when a user visits a career course page but does not complete a purchase, the system will personalize a promotional message based on historical data to entice the user to complete the transaction. The dynamic optimization strategy significantly reduces advertising costs and improves marketing conversion rates [5].

A notable case is a career planning platform that refines the user's behavior pattern into multiple specific labels by integrating recommendation algorithms and dynamically adjusting the content presentation with real-time data. This strategy resulted in a 30% increase in user retention on the platform within a year while reducing service costs by 15% [6].

2.2. Wide application of intelligent customer service system

The AI-driven intelligent customer service system has brought revolutionary changes to the service process of enterprises with career planning tools. The traditional manual customer service model usually leads to slow response and low user satisfaction due to limited resources. Through the introduction of NLP technology and deep learning algorithms, the AI customer service system can achieve 7×24 hours of automated services and has the above ability to understand user needs. For example, when a user puts forward the question "I want to become a product manager," the system can recommend relevant courses and career advice according to the user's resume and market trends, and even provide real-time active employment opportunities [7].

Another advantage of AI customer service systems is their ability to continuously learn and optimize. By analyzing user feedback data, the customer service system can dynamically adjust the answer logic and content to better meet user needs. This optimization mechanism not only improves the efficiency of services but also saves a lot of labor costs for enterprises. According to statistics, after deploying AI customer service on a career planning platform, customer satisfaction increased by 20% and customer service response time reached 60% in total, which is equivalent to improving user experience [8].

In addition, intelligent customer service recommendations work in conjunction with other AI application modules, such as integration with personalized systems, to provide users with a full range of career planning support. This multi-module linkage model enhances the integrity and fluency of the service so that career planning tool companies can establish a more solid technical advantage in the market competition.

3. Data-driven business decisions and market opportunities

3.1. Data analysis improves business insight

One of the core advantages of AI in the career planning tool business is its powerful data analysis capabilities. Through AI technology, enterprises can comprehensively collect users' behavioral data, career interests, and career development goals, and transform these data into accurate

business decision support tools [9]. For example, the platform can track users' behaviors such as click path, stay time, and preferred labels when browsing career development content, thus predicting users' potential career development needs. The quantification of this behavior pattern enables enterprises to dynamically optimize product design and provide users with more attractive service and course choices [10].

In addition, the AI system is able to identify specific problems encountered by users during their development. For example, while some users may have doubts about transformation due to a lack of industry-relevant experience, AI can generate customized transformation recommendations based on data analysis, including recommendations for suitable introductory courses, industry mentors, or job search guides. This precise service effectively improves user engagement and platform stickiness [11].

In a highly competitive market environment, the dynamic nature of data analysis gives enterprises the ability to respond quickly. For example, when the demand for talents in certain career fields (such as data science and green energy technology) surges, AI can quickly adjust course strategy recommendations and provide users with relevant skills training, which not only helps users seize market opportunities but also brings significant revenue growth for enterprises [12]. According to statistics, after a career planning platform introduced real-time data analysis, the sales of its popular courses increased by 40% year-on-year, and the user retention rate also increased significantly [13].

In addition, long-term strategic planning is also an important application direction of data analysis. By analyzing user behavior patterns, churn causes, and market trends, companies can optimize service content and plan user experience. For example, a career company found that a large number of users gave up the purchase due to the impact of the payment method, and it launched the "installment payment" and "free trial" functions, and the course conversion rate quickly increased by 25%. This indicates that business optimization based on data analysis can not only improve the current operational efficiency but also provide an important reference for enterprises to formulate long-term strategies [14].

3.2. Market expansion potential and cross-border cooperation

AI technology opens up a new path for the global expansion of career planning tool enterprises. Through cross-border e-commerce platforms, companies can break through geographical restrictions and promote career planning services to the global market. In this process, the multi-language support technology of artificial intelligence plays an important role. Based on the translation and content localization capabilities of natural language processing (NLP), the career planning platform can provide personalized services to users of different cultural backgrounds. For example, the multilingual career planning assessment tool launched by a language platform covers four major languages, English, Spanish, French, and Chinese, which provides great support for the user growth of the North American and European markets [15].

Cross-border cooperation is also an effective strategy for career planning companies to seize the market. By partnering with international educational institutions, vocational certification bodies, and industry associations, companies can quickly open up to emerging markets. In addition, some enterprises provide users with real-time job opportunity initiative functions through cooperation with international recruitment platforms and job search websites.

4. Challenges and risks of AI-driven models

4.1. Data privacy and security risks

The widespread use of AI in the career planning tool enterprise first involves the collection, storage and processing of user data. This data often includes sensitive information such as the user's professional interests, behavioral records, and personal background. Once the data is leaked, it will not only cause serious damage to the user's trust but also may bring law. In recent years, data privacy problems have occurred frequently, especially in career planning tools involving a large number of user behavior data and personal information, which makes this problem urgently prominent.

To address this risk, career planning tools organizations need to adopt a multi-layered data security strategy, including but not limited to:

(1) Data encryption: High-strength encryption technology is used in data storage and transmission to ensure that user information is not illegally obtained.

(2) Rights management: Through refined rights control, limit the access rights of different employees to data, and reduce the risk of leakage from the source.

(3) Privacy compliance: Strict compliance with national data protection regulations.

4.2. Technology dependence and enterprise transformation challenges

The application of AI technology requires enterprises to have high technical capabilities, but for some traditional career planning enterprises, this transformation process may face greater challenges. Enterprises need to invest significant resources to upgrade technology and adapt and optimize existing business processes. At the same time, enterprises need to overcome the adaptation of employees to new systems when implementing new technologies. In addition, enterprises need to maintain an agile organizational structure to cope with rapid changes in the market environment.

5. Future application of AI technology in career planning enterprises

5.1. Integration of virtual reality (VR) and augmented reality (AR) technologies

As virtual reality (VR) and augmented reality (AR) technologies mature, career planning companies can leverage these tools to provide users with more authentic and interactive career exploration experiences. For example, by wearing VR devices, users can "immerse" themselves in different work scenarios, from an engineer's research and development lab to a marketing team's brainstorming session. In this way, users can experience the working environment of different professions in an immersive manner, resulting in a deeper understanding and real expectations for career choices.

AR technology opens up a new path for vocational skills training. For example, AR applications can provide real-time guidance or correct operational errors while users practice. The career planning platform combined with AR technology to develop a set of "career entry" training camps for users, including simulated interview guidance and teamwork task drills. This interactive training not only improves learning outcomes but also helps users adapt more quickly to the professional environment.

5.2. AI-driven intelligent career planning path design

While traditional career planning is often based on static data and standardized evaluation results, AI technology injects dynamic and customized capabilities into career path design. AI systems can design a tailor-made career path by analyzing users' interests, preferences, skill backgrounds and market demand. For example, for a user planning to become a data analyst, the system can recommend relevant study programs, certification courses, and real-time industry updates based on the changing market demand for data analytics skills.

5.3. Development prospect of personalized career assessment and employment recommendation system

Future career planning tools will focus more on the accuracy and comprehensiveness of individualized assessments. By integrating users' social data, educational background, career history, and interests, AI can generate comprehensive career development reports for users. These reports not only include an analysis of the user's current skill match but also provide specific career development recommendations in conjunction with market dynamics. For example, a sales manager might be advised to take advanced marketing courses or take leadership training to enhance his or her career.

More importantly, these assessment systems will be connected with real-time employment data to form a dynamic career development ecosystem. For example, AI can scan the job demand in the recruitment market in real-time, compare with the user's skill match, and find the most suitable job for the user, through cooperation with the global recruitment website, can achieve this function. This employment recommendation model significantly improves the efficiency of users to find the ideal position, while also providing enterprises with a highly matched campaign.

In the future, such systems may also expand into multi-stakeholder career ecosystems. For example, user career planning paths and assessment results can be shared directly with educational institutions, training institutions, and recruitment platforms, a highly interconnected career development network. This network can achieve seamless connection from skills learning to career development, thus significantly a job search cycle and improving career success.

6. Conclusions and future prospects

The AI-driven career planning tool Enterprise e-commerce model creates huge potential for enterprises to grow. Through personalized recommendations, intelligent customer service and data analysis, enterprises can more accurately meet user needs and take advantage of market competition. However, while enterprises enjoy the convenience brought by AI technology, they also need to address the challenges of data privacy, technology dependence, and market transformation.

The AI-driven e-commerce model is not only an important tool to respond to market changes, but also a key path to promote sustainable development in the career planning industry. In the context of continuous changes in technology and markets, career planning companies need to keep up with trends and continue to innovate to meet the challenges and opportunities of the future.

Disclosure statement

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Analysis of the Training Mode of Composite Digital Media Technical Personnel Based on Project-based Teaching

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Abstract:

Project-based teaching is a new kind of teaching method formed based on the progress of educational theoretical research and the accumulation of practical experience, which is of great significance to enhance the ability of knowledge application of talents. The implementation of project-based teaching is the stage result of China's educational reform and plays a driving role in the development of educational enterprise. This paper will analyze the relevance of project-based teaching in the training of composite digital media technical talents, with the aim of fully exploiting the advantages of project-based teaching, improving the practical ability of digital media technical talents, and conveying high-quality talents to the society.

Keywords:

Project-based teaching
Digital media technical personnel
Cultivate

1. Introduction

Digital media technology is an emerging technology that rises with the development of the era and social progress. With the surging demand for talents, it has become an important part of college talent training to continuously strengthen the cultivation of talents in related fields. It is of great practical significance for the development of the industry to carry out the cultivation of composite digital media technical talents through project-based teaching. At the same time, it also promotes the continuous updating and iteration of the talent training model in the field of education.

2. The significance of the application of project-based teaching in the training of composite digital media technical personnel

2.1. Is conducive to improving students' practical ability

Project-based teaching is a teaching mode based on actual projects, which plays an important role in improving students' practical ability. Through project-based teaching, students can realize the integration of theory and practice in real projects, stimulate students'

innovative thinking, and achieve the goal of compound talent training. This teaching mode enables students to transform abstract theoretical knowledge into concrete applied skills by putting them in real or simulated working environments, in which middle school students are no longer passive knowledge recipients, but active participants and creators [1]. Project-based teaching encourages students to explore and experiment, and apply what they have learned to solve practical problems, which not only exercises their hands-on ability but also stimulates their innovative thinking. When facing the challenges arising in the project, students must learn to think independently and find new ways to solve problems, which is crucial for their future careers [2].

2.2. Conducive to improving students' professional quality

Under the background of modern society, the requirements for college graduates are constantly increasing. They not only need to have professional knowledge and ability but also need to have certain professional qualities. Through project-based teaching, students can feel the real workplace environment during their study in school, which is conducive to improving students' professional quality [3]. In the mode of project-based teaching, students not only need to complete specific project tasks, but also learn how to effectively communicate and coordinate resources in a team, and solve problems efficiently within a limited time. These experiences enable students to gradually master the art of time management in practice, and learn how to keep calm and organized in the tense pace of work. This is essential to enhance their professional quality in the future workplace [4].

2.3. Help students to carry out targeted learning

Project-based teaching allows students to learn and practice in a real environment, from which students can identify their shortcomings and defects, which plays an important role in students' targeted learning and improvement. Through the implementation of project-based teaching, students can test their learning effect in project practice and aim at their shortcomings in learning. This forward-looking teaching strategy lays a

foundation for students to improve their working ability after going out of campus [5]. At the same time, during the implementation of project-based teaching, students can choose projects that stimulate their enthusiasm and challenge their abilities according to their interests and professional directions for in-depth research and exploration. This personalized learning method not only meets the diversified learning needs of students but also helps them focus more on their professional fields. Thus, more targeted learning can be carried out [6].

3. Existing problems in project-based teaching in the training of composite digital media technical personnel

3.1. Disconnect between project design and market demand

With the continuous in-depth development of project-based teaching, the advantages of this teaching mode are gradually highlighted, but the existing problems cannot be ignored, and the problem of project design and market demand is the first. This disconnect is largely because the pace of content updates is not keeping pace with the rapid development of the digital media industry, and teachers and curriculum designers rely more on traditional curricula and existing knowledge systems when planning projects, rather than taking into account emerging technologies, industry trends, and corporate needs. As a result, although students have mastered a solid theoretical foundation and certain technical abilities after completing the project, they may feel powerless in the face of real work scenarios [7].

3.2. Teachers' project teaching ability needs to be improved

Project-based teaching is a kind of innovative teaching implemented based on a new educational concept. This new teaching mode is a challenge to some teachers, some of whom have adapted to the traditional teaching methods and have insufficient teaching ability for project-based teaching. Some teachers lack sufficient understanding of the latest developments and applications of digital media technologies, and they are not familiar enough with emerging virtual reality, augmented reality, or artificial intelligence applications in the media field to integrate

these cutting-edge technologies into their teaching programs. At the same time, project-based teaching requires teachers not only to possess solid professional knowledge but also to possess good project management ability and teamwork guidance ability. Some teachers lack experience in these aspects, which not only affects students' learning experience in the project but also may lead to the failure of the project to achieve the expected teaching objectives [8].

3.3. Students' enthusiasm for project participation is not high

Another problem in project-based teaching is the low enthusiasm of students to participate in project-based learning. On the one hand, the project design is not attractive enough to stimulate students' interest in participation, and on the other hand, students' learning inertia, a large part of students have been accustomed to traditional education mode, and this new teaching method makes students at a loss. In addition, due to the lack of a deep understanding of digital media technology, some students lack a clear plan for future career development in this field and thus appear to be less committed and active in the project. At the same time, the project-based teaching model requires students to have strong independent learning abilities and innovative thinking, which is undoubtedly a huge challenge for students who are accustomed to traditional teaching methods. They feel helpless when facing project tasks that require independent thinking and teamwork, which affects their enthusiasm for participation [9].

4. The application of project-based teaching in the training of composite digital media technical personnel

4.1. Deepen school-enterprise cooperation and implement targeted project teaching

The application of project-based teaching in the training of talents in composite digital media technology is to improve students' knowledge application ability through practical projects so that students can contact real projects in advance, to lay the foundation for students' future internship and employment. Most of such real projects come from enterprises, so it is necessary to deepen the cooperation between schools and enterprises. The implementation of targeted project teaching is the key to training composite digital media technical talents [10]. The school should carry out in-depth cooperation with corresponding enterprises to jointly develop and implement project teaching plans in the field of digital media technology. Through such cooperation project tasks, students can keep up with the latest trends in the development of the industry, ensure that their knowledge and skills are synchronized with the needs of enterprises, and enterprises can provide students with internship opportunities in the actual working environment. Students are allowed to apply what they have learned in real work scenarios to deepen their understanding and mastery of theoretical knowledge [11]. At the same time, the role of teachers is particularly important in the process of implementing targeted project teaching. Teachers need to deeply understand each student's interest and professional expertise, and then design project tasks that can stimulate the potential of students according to this information. For students who have a strong interest in animation, teachers can design projects related to animation production. This lets the students learn the skills of software operation, storyboard creation and character design of animation design in practice. In this way, students can not only apply the theoretical knowledge learned in class to practical operation but also find their shortcomings in the project to learn and improve in a targeted way. In addition, teachers should also encourage students to actively communicate and cooperate with peers in the project, and complete project tasks through teamwork, so that students can learn how to effectively communicate in a team, and develop the ability to resolve conflicts and coordinate different opinions [12].

4.2. Strengthen teacher training and improve teachers' practical teaching ability

The implementation of project-based teaching mode has higher requirements for teachers' teaching ability, so it is necessary to continuously strengthen teacher training, improve teachers' practical teaching ability, adapt to the new requirements of project-based teaching, and implement project-based teaching in a more effective way [13]. First of all, schools should give full play to the role of the main body of education, and regularly organize teacher training, including the latest digital media technology, project teaching methods, teamwork

skills, etc., to ensure that teachers can timely grasp the industry's cutting-edge knowledge and teaching skills. Secondly, the school can invite industry experts or senior teachers to give lectures in the school. Through face-to-face communication, teachers can deeply understand the development trend of the industry and practical experience in project teaching. Through these training measures, teachers can not only improve their practical teaching ability but also better guide students to carry out project learning. Promote the effective implementation of a project-based teaching model in the training of composite digital media technical talents [14]. In addition, for project-based teaching, a highly practical teaching method, schools can establish long-term cooperative relationships with digital media enterprises, so that teachers can have the opportunity to participate in actual projects of enterprises. Such enterprise practice not only enables teachers to personally experience the working process and challenges of the industry but also helps them to establish a project case base that matches the needs of enterprises. The experience and insight accumulated by teachers in practical work will be directly transformed into vivid cases and practical skills in classroom teaching, which will greatly improve the pertinence and effectiveness of teaching [15].

4.3. Innovative project forms to stimulate students' enthusiasm to participate in the project

On the one hand, the effective implementation of project-based teaching in the training of composite digital media technical talents depends on the teaching ability of teachers, on the other hand, it also requires the active participation of students. In order to enhance the participation enthusiasm of students, it is necessary to constantly innovate the teaching forms of projects and enhance the attractiveness of projects to students [16]. Schools can collaborate with digital media companies to design projects that are closely connected to the real market, such as developing a new mobile app,

planning an online marketing campaign, or designing an interactive game. These projects not only allow students to experience cutting-edge technologies and workflows in the industry. It also enables them to learn how to collaborate with team members, how to manage projects, and how to think creatively while solving real problems [17]. At the same time, the school can introduce a competition mechanism, hold a digital media creative competition in the school, and encourage students to create and display around a specific theme, through such competition, students can not only gain practical experience, but also find their potential and shortcomings in the competition, to improve themselves more targeted in the follow-up study, and encourage students to participate in entrepreneurial projects. Transforming their ideas into actual products or services can not only enhance students' practical ability but also cultivate their entrepreneurial spirit and market awareness [18]. In addition, in the form of projects, schools can try project-type projects, allowing students to participate in teachers' scientific research projects for in-depth academic exploration, which enables students to conduct independent research under the guidance of tutors and cultivate their research ability and critical thinking [19]. Through these innovative project forms, students' learning will no longer be limited to textbook knowledge but can be closely combined with practical work, thus greatly enhancing their learning interest and engagement [20].

5. Conclusion

As a brand new teaching mode, project-based teaching is of great significance in the training process of composite digital media technical talents. It not only strengthens students' theoretical knowledge but also enhances their knowledge application ability and professional quality. This forward-looking teaching mode lays a solid foundation for students' future work and study. Promoting this practice teaching mode has become an inevitable direction for the development of our country's education.

Disclosure statement

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Employment-oriented "Post Courses and Certificates" Integrated Curriculum Reform and Practice: Take the Course of Urban Rail Transit Operation Regulations as an Example

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A b s t r a c t :

Under the background of the Greater Bay Area on the construction track, the problem of how to cultivate high-quality technical talents in line with the needs of local social and economic development is in front of us, so we should actively explore the curriculum reform. This paper takes the urban rail transit operation rules course as an example, through the "post-class card" financing, realize the teaching content and post standard, national vocational skills competition, 1 + X certificate assessment standard, make the teaching content and post standards, teaching process and work process, in the teaching process into skills contest, 1 + X certificate assessment content and assessment standards. After the implementation of the curriculum reform, students' knowledge, ability and quality of three-dimensional goals have been greatly improved.

1. Introduction

The course of Urban Rail Transit Operation Regulations belongs to the core course of each major in the urban rail transit major group. The purpose of the course is to make students system learning urban rail transit professional group of main tasks, should know should be rules and regulations and safety management, enable students to more understanding of urban rail transit professional jobs, to make the students master the urban rail transit operation management, the main equipment operation, maintenance, safety management, further enhance students' professional quality, after graduation for urban rail transit production, service, management, and other line work to lay a solid foundation.

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2. Employment-oriented "post-class competition certificate" integrated teaching design

The major of Urban Rail Transit Operation and Management of the university was launched in 1996 and began to recruit students independently in 2003. It is the earliest university in Guangdong Province to train professional talents for subway companies. Students are mainly local students in Guangdong Province, and their graduates are mainly for rail transit enterprises in the Greater Bay Area, such as Guangzhou Metro, Foshan Metro and Dongguan Metro. General Secretary Xi pointed out: "Urban rail transit is the development direction of modern big city transportation. We should continue to vigorously develop rail transit and build a comprehensive, green, safe, and intelligent three-dimensional and modern urban transportation system." With the rapid development of urban rail transit, the demand for talent of subway enterprises not only increases in quantity but also puts forward higher requirements in quality. With the increasing application of new technologies and new equipment in urban rail transit enterprises, the post-capacity of the subway industry tends to be more integrated. For example, station operators not only need to have basic passenger serviceability but also need to be familiar with the knowledge of driving safety, emergency response and other aspects, as well as service awareness and communication ability. As a model of high-quality development, the Greater Bay Area should take the lead in making its contribution to the training of high-quality technical and skilled personnel. Taking Guangzhou Metro as an example, Guangzhou Metro, as the leader of urban rail transit enterprises, takes the lead in vigorously developing the construction of smart urban rail, reduces the pre-job training time for new employees, reduces costs and increases efficiency, and recruits students majoring in urban rail transit operation and management in our school mainly engaged in station posts and driver posts. To enable students to adapt to the changes in the needs of enterprises as soon as possible, we are required to develop talent training programs and curriculum standards to seamlessly dock with the needs of enterprises, so that students can meet the requirements of "graduation is the post, the post is competent" [1].

2.1. Docking with the "post-competition certificate" and reconstructing the teaching content

With the increasing application of new technologies and new equipment in urban rail transit enterprises, enterprises have also put forward higher requirements for the quantity and requirements of high-quality compound talents. This course connects with the needs of enterprises, According to the higher vocational school urban rail transit operation management professional teaching standard, the urban rail transit attendant national vocational skills standard (2020 edition), the urban rail transit train driver national vocational skills standard (2019 edition) and the urban rail transit operation management regulations (2018-8), the urban rail transit operation emergency plan preparation specification (JT / T1051-2016) and other industry norms and standards, docking with 1 + X certificate standard, National Vocational Skills Competition, to revise the talent training plan for Urban Rail Transit Operation and Management majors and the curriculum standards of Urban Rail Transit Operation Regulations, employment-oriented approach, based on the post ability and working process of students after employment, refactoring of the teaching content of the modular course. The reconstructed teaching tasks are shown in **Table 1**. The teaching content of "post-class competition and certificate" is divided into four modules, 12 teaching tasks, 12 vocational skill points of 1 + X certificate-related modules and 10 skill points of vocational college skills competition [2].

2.2. Docking with the "post-competition certificate" and formulating the "three-dimensional" teaching objectives of "class"

As rail transit enterprises new technology, new equipment upgrades, the post setting, and post ability also changed, gradually to a post pluripotent, for the change update course of theory and practice training content, into the counterpart industry of new technology, new technology, new knowledge, new methods, determine the "post" knowledge, ability, quality goals. "Competition" is the students on special skills, the content of the "game" and comparison, generally is the "post" special skills strengthening, to a certain extent is a special skills level lead, and student's skill level, course teaching achievements, such as the world skills contest, the national

Table 1. Modular structure of the course of Urban Rail Transit Operation Regulations

Course	Teaching module	Teaching task	Lesson hours
Urban Rail Transit Operation Regulations	Module 1: Operation and Management Foundation of Urban Rail Transit (8 hours)	Task 1: Be familiar with the main driving equipment	4
		Task 2: Understand the main operation positions	4
	Module 2: Crew organization management	Task 1: Operation Specification for Train Drivers	4
		Task 2: Train driving under special circumstances	4
		Task 3: Train troubleshooting	4
		Task 4: cabin crew management	4
	Module 3: Station organization and management	Task 1: Station operator operation	4
		Task 2: Driving duty officer operation	4
		Task 3: Passenger duty officer operation	4
		Task 4: Station master on duty	4
	Module 4: Operation and maintenance of the main equipment	Task 1: Vehicle operation and maintenance	4
		Task 2: Station main equipment operation	4

vocational college's skills contest, the recognized high level of competition standard, skills, literacy, "class" into determine for "game" knowledge, ability, quality goals. 1 + X certificate system is led by industry enterprises combined with relevant positions, and X certificate mainly connects with the actual needs of enterprises and standard professional skill level certificates. According to the skills needed to be mastered in the 1 + X certificate, the knowledge, ability and quality objectives of the "certificate" are integrated into the "class." Docking with the "post-competition certificate," the three-dimensional goals of the course, realize the "post" as the guidance, "competition" as the guide, "certificate" as the test, and truly achieve multi-dimensional training of high-quality technical and technical talents. Determine the teaching focus according to the core skill points required by the "post-competition certificate."

2.3. Docking with "post-competition certificate" and determine the teaching difficulties in "class" based on learning situation analysis

Based on system research analysis, integrating "leading follow-up" analysis multidimensional learning, based on the research report, to the student's knowledge and skills, cognitive and practical ability, learning characteristics, and the urban rail transit station management, the urban rail transit station facilities leading course learning comprehensive analysis through teachers interview, baseline test, the urban rail transit driving organization, the urban rail transit safety management and other follow-up course baseline comprehensive analysis, determine the overall situation of students, individual characteristics. Combined with the course teaching content determined for the "post-competition certificate," the teaching difficulties in the "class" are determined with the students as the main body and the results of the learning situation analysis [3].

2.4. Docking with a "post-competition certificate" and deeply excavating the ideological and political elements of "class"

Urban rail transit operation rules course corresponding to the basic jobs for the station attendant and the driver, the future development post for the attendant, duty webmaster, post requirements such as Wuxi, safety first, passengers first, obey command, overall situation consciousness of professional quality in the course knowledge or skills training to dig deeper, cultivate students labor spirit, the spirit of labor model. In the process of students participating in various high-level professional competitions, to achieve excellent results, need students have a competitive spirit, and innovative spirit, in the course by setting hierarchical progressive skills training, setting open topics and group PK, and other forms to cultivate students' competitive consciousness, innovative spirit, 1 + X certificate connects with the actual needs of the enterprise and closely fits the standard work process of the enterprise, which requires students to have a strictly prohibited work style, meticulous work attitude, and work strictly according to the standards. To cultivate students' above qualities in the routine

teaching should strictly require students, to not be late or leave early, use the practical hours in the course to carry out standardized training of typical tasks, and cultivate students to develop a good habit of acting according to the rules. Through docking "postcard," dig deeper into the "class" ideological elements, the ideological elements in the course design run silently penetration, the students into technical double high-quality technical skills, skilled, craftsmen, for rail transit enterprise high-quality leapfrog development to provide strong talent and skills support.

3. Implementation process

Docking with the "post-competition certificate," the implementation process takes students as the main body, teachers as the leading, the modular teaching mode based on the work process, taking task two in the organization and management of three rail transit stations as an example, introduces the specific course implementation process.

The knowledge points and skill points of the "post-course competition certificate" will be integrated into the course teaching content as shown in **Figure 1**. Before class, the knowledge points and skill points of the "post-course competition certificate" will be released to students through the learning pass for the pre-class learning test. Students post messages to feedback on the questions, and teachers collect and sort out the feedback questions [4].

In class, the teachers focused on the pre-class test results and students' feedback, found that the students did not properly grasp the contents of the telephone blocking method and the operation and troubleshooting of the ATS signal system in the driving organization under abnormal conditions, Based on the working process of driving duty officer, targeted explanation of the disposal process through the group training on the operation and troubleshooting of telephone occlusion method and ATS signal system in the urban rail comprehensive training room, Group PK after skilled training. Student groups evaluate their group members, and mutual evaluation between the group members, the three-part weighted calculation forms the final evaluation results of this learning task. In the learning process, students can carefully check the spare parts required by the post, develop a rigorous and meticulous working attitude, and operate in strict accordance with the assessment standards

of the 1 + X certificate, to see the eyes, hands, and mouth and use standard language. Group members carry out training by position (role-playing) to cultivate students' teamwork ability and hard-working quality. The task is set by the teacher, and the group is willing to handle the ATS equipment fault according to the disposal process of the urban rail intelligent transportation skills competition, to cultivate the students' strain ability and innovative spirit, and also train the players for the following participants.

After class, students can use the training room open all day for proficiency training, and they can also conduct independent training according to the scoring standards of the competition to prepare for the competition. However, students are required to use it according to the rules of the training room and develop good habits. Due to the individual differences of students, the problems reported by individual students before class may not be solved one by one in class, so we set up an after-class help group, which is responsible for answering the questions of individual students. In this form, it solves the problem of individual differentiation of students' learning, increases the learning communication between students after class, and increases the cohesion between students. At the same time, it also exercises the explanation ability to help students, which helps to deepen the understanding of the learning content of the students.

Through "post-class card" depth fusion, improve the students' knowledge skills, give full play to the students in the teaching process, truly with the student as the main body, the teacher leading teaching idea, through learning before class, in-class, after-class task test, timely tracking of the learning content, before class, after class, class closed-loop management [5].

4. Effectiveness of curriculum teaching reform

4.1. Course pass rate

After curriculum reform students' knowledge more solid, skills more solid, quality targets generally improved, and course assessment pass rate from 90% before the curriculum reform, up to 100%, this improvement also reflects the effectiveness of teaching methods and evaluation system, as well as the improvement of students' learning attitude and ability, 3d target

achievement is high.

4.2. Certificate pass rate

1 + X certificate assessment knowledge points are integrated into the course, and targeted skills training is carried out through the practical teaching part of the course. The pass rate of 1 + X urban rail attendant is 100%. This shows that when the course design and practical teaching are closely combined with the 1 + X certificate assessment knowledge points, students can better master the required skills required to achieve excellent results in the certificate.

4.3. Results of skills competition and teaching ability competition

Integrating the knowledge points and skill points of the national vocational skills competition into the course, and using the assessment standards of the competition, the students' competition ability has been greatly improved. Students have won two provincial first prizes, 8 second prizes and 6 third prizes in the professional skills competitions. Teaching and learning, through the depth of the course mining, teachers participate in the teaching ability competition and win the provincial second prize and a third prize.

4.4. Patent application results for teaching, research and educational reform

Teachers and students participated in the application of 5 national invention patents, and 3 authorized, one of which was 100,000 yuan and was awarded the top 20 most practical invention patents in Guangdong Province. Ten utility model patents have been authorized, and one silver award in the innovation and entrepreneurship competition has been won. Students' awareness of innovation has been significantly enhanced, and the level of teachers' teaching research and reform has been steadily improved.

5. Teaching reflection and improvement

(1) Explore value-added evaluation

Although the multi-multi-subject evaluation system is adopted in the course evaluation, the index system of value-added evaluation is not perfect and perfect. In future course evaluations, a feasible and operable value-added evaluation index system should be formulated according to the individual differences of students to make the course evaluation system perfect.

(2) Practical teaching ability needs to be further improved

The rail transit industry has developed rapidly, and new technologies and equipment are updated rapidly, but the update of school teaching hardware and software resources is relatively slow. Teachers under the enterprise exercise time, the enterprise new equipment practice teaching ability is insufficient, and also cannot keep pace with the development of enterprises. Cooperation with organic integration urged professional teachers to enterprise field practice, participate in enterprise technology research and development, and improve the enterprise part-time teachers to participate in practice teaching.

6. Conclusion

Further promoting "post-class card" financing course teaching reform, adhering to technology and repair, insisting on teaching integration, enterprise cooperation, work-integrated study, market and promote employment, oriented practice, strengthening ability, has quality training as the lead, to the ability to cultivate the standard, improve high-quality technical personnel training quality, for the construction of the large bay area of useful orbit.

Disclosure statement

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Practices and Reflections on Innovation and Entrepreneurship Education in Universities from the Perspective of Industry-Academia Collaboration: Taking University A as an Example

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A b s t r a c t :

Innovation and entrepreneurship education in colleges and universities is not only a requirement for economic and social development but also a realistic demand for cultivating students' innovative spirit and creative ability. At present, innovation and entrepreneurship education in colleges and universities is facing many practical difficulties. By analyzing the connotation and significance of "industry-university integration," and combining it with the practice of innovation and entrepreneurship education in A University, this paper discusses the effective path of innovation and entrepreneurship education reform in colleges and universities from 5 aspects: establishing the system, setting up institutions, clear path, building team and excellent environment, to provide reference for the reform and innovation of innovation and entrepreneurship education in colleges and universities.

1. Introduction

Entrepreneurship education focuses on fostering individuals with the courage to innovate and the ability to challenge the unknown. It emphasizes the spirit of exploration and innovation, which is crucial for students' comprehensive development. Innovation and entrepreneurship education are key to higher education reform and personnel training quality improvement [1]. Despite some challenges in implementation, universities have made progress in this area [2,3]. Industry-university integration, involving close cooperation between educational institutions and industries, can enhance entrepreneurship education by sharing resources and leveraging strengths. This paper examines how industry-

university integration supports entrepreneurship education, using A University's practical case as an example.

2. Exploration of the practice of innovation and entrepreneurship education under the mode of industry-university integration in A University

2.1. Integrating innovation and entrepreneurship education into the undergraduate education training system

A University, a key provincial institution in Guangzhou, Guangdong Province, has developed a comprehensive talent development model emphasizing innovation and entrepreneurship. This model integrates classroom learning, industry collaboration, platform support, and regional features to foster students with a sense of patriotism, international perspective, and strong foundational skills. The university offers structured courses in professional education, innovation and entrepreneurship knowledge, and general education, complemented by an implicit curriculum focusing on entrepreneurial culture[2]. Additionally, the university integrates entrepreneurship education into undergraduate programs and employs tutorial systems and school-enterprise partnerships to enrich teaching methods. At the same time, several compulsory or elective courses on popular innovation and entrepreneurship knowledge are offered (**Table 1**).

Venture capital and mentorship are offered to support project growth and team development. Students interested in entrepreneurship are provided with classes, core courses, and cultural activities. Freshmen and sophomores engage in innovative practices, while juniors and seniors are assisted in starting businesses using the school's platform and a tiered funding system. This promotes creative thinking and independence. To improve practical skills, universities should increase collaboration with businesses and industries through internships, projects, and research partnerships. A mentoring system should be set up for entrepreneurs and experts to guide students.

2.2. Deep integration with industries to cultivate students' industrial thinking and innovation and entrepreneurship abilities

The school blends local elements and strategically attracts top talents from underdeveloped regions to foster innovation and entrepreneurship education. Distinguished figures like Hanno, Monet, and Zhang Guohao are engaged to guide students on industry trends, industrial thinking, advanced lectures, innovative courses, and corporate research initiatives. The school also emphasizes enhancing faculty-industry interaction, aiming to boost teachers' academic achievements and market value. Through collaborative recruitment with enterprises, joint innovation platform development, talent sharing, and creativity stimulation, the school has set up R&D centers on campus and extended educational platforms into companies, bridging the gap between theory and practice for student innovators to ensure practical experience

Table 1. Innovation and entrepreneurship knowledge courses

Course type	Course name	Course credits
Compulsory	Career Planning and Entrepreneurship Education for College Students	2.0
Compulsory	Social Practice	2.0
Elective	Career Design and Management	1.5
Elective	Marketing	1.5
Elective	Enterprise Management	1.5
Elective	Entrepreneurship Management	2.0
Elective	Entrepreneurship	1.5
Elective	investment science	1.5

for teachers, a system under the Guangdong Provincial Science and Technology Commissioner Project mandates mid-career teachers to spend at least half a year in enterprises every three years.

2.3. Integration of internal and external innovation and entrepreneurship training and practical resources

The collaborative innovation platform is planned and built to emphasize its educational role, focusing on scientific research and social service. The platform's management oversees its development, the school's teaching and research, and student training. It aims to gather international academic resources and talent, address key issues in industrial transformation, and cultivate innovative professionals. Throughout its construction, the platform transforms academic strengths into training advantages and integrates social services with education. It has attracted international design experts, served over 500 companies in 8 years, trained more than 1,000 students, and won prestigious design awards, enhancing student employment opportunities [3].

2.4. Strengthen cooperation in the Guangdong Hong Kong Macao Greater Bay Area, promote innovation and entrepreneurship training and incubation for college students

The Entrepreneurship Center at Hong Kong University of Science and Technology and Guangdong Yueke Financial Group aims to develop the innovation and entrepreneurship college as a platform for training and incubating university students from Guangdong and Hong Kong. The School of Innovation and Entrepreneurship has designed a comprehensive training model, curriculum, faculty, incubation platform, and investment mechanism, aiming to establish a talent cultivation nursery, an exchange platform, a demonstration base, and a research center for innovation and entrepreneurship. It has also collaborated with the Hong Kong University of Science and Technology to create an innovation and entrepreneurship base for students from both regions. The school places significant emphasis on the system to ensure the smooth advancement of innovation and entrepreneurship education, providing financial and position support, as well as incentives such as course exemptions and credit recognition.

3. Effective path of innovation and entrepreneurship education in colleges and universities from the perspective of industry-university integration

Colleges and universities should focus on problem-oriented education, incorporate systematic thinking, and establish a comprehensive innovation and entrepreneurship ecosystem involving government, schools, industry, and businesses [4,5]. This ecosystem aims to integrate education with production, innovation, and entrepreneurship, to connect the education chain with talent, industry, and innovation chains.

3.1. Focus on improving innovation and entrepreneurship education policy system

Government leadership and policies significantly impact the development of innovation and entrepreneurship education in higher education. The state has introduced guidelines and plans to promote this education, addressing challenges in industry-education integration through systemic reforms. Key actions include establishing curriculum standards, a development fund, and promoting collaboration between universities and industry. A steering committee should be set up to direct innovation and entrepreneurship education, with industry organizations advising the government and enterprises recognizing the value of joint research with universities.

3.2. Set up specialized agencies to organize and implement innovation and entrepreneurship education

To enhance innovation and entrepreneurship education, various departments including personnel, employment, students, and Youth League committees should clarify responsibilities and increase resources [6]. Support should be provided to promote educational initiatives, build training bases, and offer policy and incubation services. Establish institutions like the Innovation and Entrepreneurship College or Center to oversee educational systems, implement decisions, improve regulations, and manage faculty development. Integrate industry and education, combine resources from teaching, research,

and experimentation, and collaborate with external entities like governments, businesses, and research institutes. Strengthen entrepreneurship courses, reform teaching, develop a curriculum system, build a mentor team, and support practical innovation and entrepreneurship activities, including the creation of spaces and bases, and guidance for student projects and competitions.

3.3. Building a curriculum system of deep integration of innovation and entrepreneurship education and professional education

The first aspect is to evaluate teaching quality based on innovative spirit, creativity, and entrepreneurial consciousness. The second aspect is the innovative curriculum system, which should be built on the cultivation of innovative and entrepreneurial talents, breaking down barriers between disciplines and specialties. It should include a curriculum system with characteristics of "general knowledge + professional module characteristics + interdisciplinary professional intersection." This involves improving the general education curriculum, clarifying the characteristics of innovation and entrepreneurship discipline training, exploring the innovation and entrepreneurship teaching elements of professional courses, and carrying out interdisciplinary professional cross-teaching and research to form a new mechanism for training innovative and entrepreneurial talents across faculties, disciplines, and fields. It is also necessary to strengthen the ideological and political construction of the curriculum, improve the practicality of the curriculum, and focus on the assessment of the whole teaching process to comprehensively cultivate students' innovative and entrepreneurial qualities.

3.4. Introduction and training to build high-quality teachers for innovation and entrepreneurship education

Develop training, assessment, and incentive mechanisms to cultivate high-level innovative and entrepreneurial talent among teachers. Implement an innovation introduction mechanism to recruit top scientific researchers, entrepreneurs, investors, and financial and management experts as lecturers, tutors, and incubation instructors. The innovation training mechanism involves teacher curriculum training through on-campus, professional, and on-the-job methods to enhance the teaching of innovation and entrepreneurship skills, forming a core group for talent training within the school. Establish and improve evaluation standards for innovation and entrepreneurship education teachers, including an admission system, performance assessment, and an elimination mechanism. Create and refine the income distribution and performance evaluation systems for professional and technical positions, with specific evaluation methods and separate indicators, and increase rewards to boost teacher enthusiasm and initiative in innovation and entrepreneurship education.

3.5. Optimization of comprehensive guarantee conditions for innovation and entrepreneurship education

The campus should promote resource sharing by establishing simulation labs, innovation labs, and entrepreneurship training centers. Efforts should be made to create a high-quality innovation space and build practical platforms for student entrepreneurship. Cooperation with government, industry, and businesses should be strengthened to expand off-campus practical education bases, meeting students' training needs. Additionally, cultural construction should be enhanced to improve the innovation and entrepreneurship environment. Despite a nationwide entrepreneurial boom, the university culture in this area is weak, with less than 3% of graduates starting businesses [7]. Universities should take steps like organizing forums, enhancing political education in entrepreneurship courses, establishing associations, and hosting festivals to enrich entrepreneurship education. Selecting and promoting successful examples, enriching publicity, and fostering a maker culture are essential to creating a campus atmosphere that encourages innovation and entrepreneurship.

Disclosure statement

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On the Similarities and Differences Between Eastern and Western Art Cultures through Portraits of Military Attire

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Abstract:

This study compares the similarities and differences between Eastern and Western cultures in the 17th century through the analysis of character images, features, backgrounds, forms, and content in two artworks - Emperor Qianlong's Grand Military Parade and Portrait of Louis XIV in Military Attire on Horseback. It further analyzes the cultural phenomena and artistic expressions behind these works. From other artists' works showing military dress, the artistic wisdom is reflected, and the fate of Qianlong's military dress reflects the final glory and decline of the Qing Empire.

1. Background of Emperor Qianlong's Grand Military Parade

In the 17th century, both China and France reached the peak of feudal authoritarian rule. The Kangxi and Qianlong Reign marked the economic, political, and cultural pinnacle of the entire Qing Dynasty. The rulers of the Qing Dynasty successfully suppressed rebellions, stabilized the south, and secured the northwest. The agricultural policies promoted by them at that time fundamentally solidified the dynasty's rule. In cultural development, Emperor Kangxi, Yongzheng, and Qianlong actively studied Chinese traditional culture, aiming to maintain their rule. Kangxi once said that he had been saturated with Confucian classics since he was five. Many artworks left during the Kangxi and Qianlong periods show that they described themselves as scholars, ancient saints, and gods. In "Emperor Qianlong Celebrating the Lantern Festival" painted by Giuseppe Castiglione, Qianlong's image is to resemble a Taoist deity holding a ruyi-scepter, wearing a tall hairpin and loose robes [1]. Similarly, in "A Portrait of Emperor Qianlong," Castiglione depicts Emperors Yongzheng and Qianlong dressed in loose robes and sleeves, holding bamboo and passing plum blossoms, embodying the image of ancient scholars, which reflects Qianlong's love and pursuit of Han culture (**Figure 1**).

Figure 1. The Qianlong Emperor's Reading by Lang Shining.

The Qing emperors' cultural aesthetics were close to the aesthetic tastes of traditional Chinese art, vividly demonstrating that the Qing emperors wanted to dialogue with ancient Chinese saints through their portraits, attempting to gain cultural identity. Such passion reflects the emperors' personal preferences, and more importantly, it tries to weaken the cultural and ethnic opposition between Manchus and Han Chinese, achieving the goal of stability [2].

2. Analysis of Emperor Qianlong's Grand Military Parade

In "Emperor Qianlong's Grand Military Parade" painted by Giuseppe Castiglione in 1739, it depicts the emperor in full military attire during a military parade. The emperor needed to wear military attire (also known as grand parade armor) for reviewing the Eight Banners. The entire attire was divided into eleven parts, made of silk and gold. Unlike the more realistic and detailed portrayal of the horse and Emperor Kangxi in other works, Qianlong and the background in this painting are treated differently. The emperor's face is in a 3/4 side view with no expression, which is related to the Confucian culture that emphasizes "not showing one's emotions." The emperor's facial features are depicted with light ink to create a stereotypical feel. Influenced by Zhao Mengfu's paintings, the horse emphasizes the emperor's gorgeous military attire and accessories symbolizing imperial status. According to records, Emperor Qianlong was

only 155 cm tall, which Castiglione did not deliberately conceal but realistically portrayed [3]. In the background, for the grassland, he first used the texture technique of Chinese painting, with additional foreground grass leaves that exhibit obvious light and shadow perspective, painted in a three-dimensional manner. The sky is based on light ink with a touch of blue added. The entire painting has no shadows, and in terms of perspective, objects appear larger in the foreground and smaller in the background, which is typical of the European perspective.

In previous imperial portraits, they were not displayed publicly but rather served the purpose of sacrificing ancestors [4]. In aesthetic paradigms, they did not focus on changes in imagery but rather depicted the subject's official robes and appearance. We can imagine that in the temple, these portraits had almost identical compositions, forms, and techniques. The images of successive ancestors dressed in gorgeous official robes were placed in a line one by one. The emperor's image, dissolved under a rich altar, a wide and towering temple, and the magnificent attire of different ancestors, was almost indistinguishable in their respective characteristics, leaving only the worship of power, noble status, and admiration for the ancestors' glorious achievements. However, in "Emperor Qianlong's Grand Military Parade," there is no stiffness or formulaic portrayal of the emperor as seen in portraits before the 17th century. Under Castiglione's brush, in combination with Western painting techniques, Emperor Qianlong returns to the human world from the throne where he was previously deemed untouchable. In the painting, Emperor Qianlong's gaze does not directly meet the viewers but slightly shifts to the right, avoiding direct eye contact. He holds the reins in one hand, a whip in the other, and supports an arrow, with a particularly relaxed facial expression [5].

3. Background of portrait of Louis XIV in Military Attire on Horseback

After the War of the Augsburg League, the ambitious French King Louis XIV sought large-scale expansion but encountered resistance from the combined forces of the Netherlands, England, Rome, and Sweden. The war reached a stalemate, yet it established France's status as the strongest country in Europe. During this period, Louis

XIV left behind his portrait in military attire on horseback. In the portrait (**Figure 2**), Louis XIV holds the reins with one hand, while the horse's hooves are raised in a state of motion. In his other hand, he holds a telescope, dressed in black leather military attire with ribbons floating behind him. These details indicate that Louis XIV is depicted riding on horseback in a war scenario. The goddess of victory in the top left corner of the painting adorns Louis XIV with a wreath of palm leaves symbolizing victory. The village in the background is shrouded in smoke, indicating a war-torn plain [6].

Figure 2. Anonymous Louis XIV on Horseback.

4. Analysis of portrait of Louis XIV in Military Attire on Horseback

Looking back on Louis XIV's life, he was France's most warlike emperor, experiencing four major wars. During his reign, he ushered in a peak of French art and culture, establishing academies for dance, painting, and others, and constructing Versailles Palace. He aspired to turn France into the foremost power in Europe, and this period marked the heyday of France's history. Although Louis XIV was only 155 cm tall, he does not appear short in this painting. By shifting Louis XIV's body position and making the horse appear smaller, the artist emphasizes Louis XIV's grandeur. The fluffy ribbons, mane, and exaggerated horse nose due to movement enhance the sense of motion in the painting. Louis XIV's stern gaze, directed at the viewer, and under the patronage of the goddess of victory, exudes confidence and arrogance [7].

5. Portraits in military uniform reflect the wisdom of the artist

Another work 100 years later, David's Napoleon Crossing the Alps St. Bernard Pass, depicts Napoleon riding on a white horse, pointing to the image of the river and mountains, the picture presents a diagonal composition, it is said that Napoleon's elevation is about 165, and the picture of Napoleon is very tall, even the white horse in front of him is very small (**Figure 3**). In another case, the 17th-century English painter Van Dyck created a portrait of Charles I, then king of England. Charles I was notoriously short and eccentric. In order to make him look less obscene, Van Dyck added a stone under his feet, made him stand above the horizon, and wore high heels, which were popular with royalty at the time, and the horses behind him bowed their heads, so that no one would question his height. It can be seen that many artists who perform imperial armor generally use contrast to deliberately conceal the defects of the emperor, and "lie" in the picture to highlight the majesty and heroism of the emperor [8].

Qianlong Emperor wore a "big Yuejia" composed of a jacket, a skirt, left and right shoulder pads, front seam, left seam, left and right sleeve. Its whole body is yellow satin, covered with copper nails, surrounded by black Fujian Zhangzhou velvet edge, yellow satin embroidered with various ruyi moire, seawater, river cliff, coral, treasure beads and other patterns, and embroidered with different forms of Zhenglong, traveling dragon, Sheng dragon, a total of 63, using a variety of embroidery methods, such as Xiangping needle, osmanthus needle, Pingjin, representing the highest level of weaving and embroidery technology in the Qianlong era. In Lang Shining's "Qianlong Emperor Reading Picture", the emperor's embroidery is vivid, showing Lang Shining's superb skills [9].

Emperor Qianlong wanted to let the world see his great achievements in the war, in his ruling career, Lang Shining drew for him "Qianlong Manshu Garden to give a banquet," "Qianlong Pacification of the Ministry Back to the Ministry of War," "Qianlong pacification of the Western Regions War" and so on. In addition, Qianlong liked to wear various costumes and have Lang Shining paint his portrait. For example, "Hongli Collecting Zhi Axis" dressed as Taoist fairies, "Peaceful Spring Letter"

of Yongzheng and Qianlong father and son in Han clothes at the same time, "Hongli Viewing Lotus playing Qin" dressed as elegant literati, "Qianlong playing with children and enjoying family happiness" and other works.

Figure 3. Napoleon Crossing the St. Bernard Pass in the Alps by David.

On June 10, the thirty-first year of Qianlong, Lang Shining died in Beijing at the age of 78. Emperor Qianlong issued a decree: "The western Lang Shining since the Kangxi years into the value of the imperial court, quite diligent careful, had awarded three top wear. According to the example of Dai Jinxian, Gaen gave the title of servant, and awarded the internal affairs office silver three hundred and two funeral care, to show the best." Lang Shining's works and most of his time are in the process of transforming Western painting into Chinese painting, he made a lot of changes, for example, in the Qianlong Emperor Reading Picture, we can see the difference in the performance of characters and backgrounds; The realistic portrayal of Qianlong's face and the deliberately avoided shadow provided a very necessary reference for the reform of Chinese painting and the improvement of oil painting. It can be said that without Lang Shining's reform and the road ahead, future generations will have to go on the road of improvement for a long time [10].

6. Differences behind the works

Reviewing "Emperor Qianlong's Grand Military Parade" and "Portrait of Louis XIV in Military Attire on Horseback," we can find that one painter was a missionary from Milan, Italy, influenced by Baroque and classical realistic oil painting from a young age. Upon arriving in China, he adjusted his ingrained aesthetic views due to local preferences, combining them with Chinese ink painting characteristics. The other artist, the painter of Portrait of Louis XIV in Military Attire on Horseback, had excellent skills in oil painting with a Baroque aesthetic.

Both artists were born in the two regions where European oil painting flourished best, during the peak of two different empires. In "Emperor Qianlong's Grand Military Parade," there are almost no shadows, and the emperor's dragon robe is meticulously detailed to reflect his status. According to modern discoveries of Qianlong's military attire, he had a circular breastplate, which the painter omitted for artistic effect. Different techniques were used for portraying the figures and background. To reconcile stylistic differences, realistic grass leaves were depicted in the front half of the meadow. Giuseppe Castiglione did not conceal Qianlong's height defect, directly related to the Manchu people's reverence for horses and proficiency in horseback riding and archery. Qianlong is depicted holding a whip and next to arrows, indicating Castiglione's influence on the Manchu's perception of horsemanship and archery. The final image is set against an ink painting-style wilderness, satisfying the aesthetic needs of upper-class intellectuals and metaphorically representing the emperor's domain.

"Portrait of Louis XIV in Military Attire on Horseback" captures a moment of motion, with Louis XIV holding a telescope, symbolizing his role as a commander on the battlefield. The goddess of victory personally adorns him with a wreath. Louis XIV spent his life waging war, living by his famous quote, "I am the state," pushing absolute monarchy to its extreme and promoting cultural development. He made outstanding contributions to aesthetics, fashion, dance, and music, turning Paris into a fashionable artistic capital aligning European aesthetics with French standards. His ultimate goal was to surpass Renaissance Rome and establish France as the foremost power in Europe.

In the painting, he stands on a saddle, leaning slightly forward. To emphasize Louis XIV's grandeur,

the painter intentionally made the horse appear smaller. The painter succeeded. Louis XIV would never expose his defects, often wearing high-heeled shoes to conceal his height. Therefore, the painter understood this and beautified it. As the emperor during France's peak, he firmly grasped power. In this painting, his right-hand holds a telescope, indicating his image as the commander of the state machine.

These two military portraits have different aesthetic tastes, and the two pictures show different meanings in different backgrounds. One is a gentle landscape, and the other is a village in flames, which can be said to be the introverted and extroverted materialization of the characters. One is the empire established by advocating natural science, which is precisely implied by the telescope, the other is the world conquered by horseback shooting, and the Qianlong Emperor's hand-holding arrows also implies the background of the country's establishment. In different regions and times, the two emperors established their great achievements and became the symbol of the era.

7. The military uniform and the fate of history after one hundred years

In historical records, Emperor Kangxi, grandfather of Emperor Qianlong, had frequent contact with Louis XIV and used French fashion as a model to build the Old Summer Palace with marble, irregular curves, and a large number of cameo accessories. After a hundred years, the fate of the Qing Empire took a sharp turn for the better. After a hundred years, they met in the Beijing and Tianjin areas and broke into the Imperial Palace, which was once the home of Emperor Qianlong. The Old Summer Palace, a French baroque building built by Qianlong, also burned to ashes, and the two Kings who had once been invincible finally met indirectly in such a way and sounded the bell of the end of the Qing dynasty.

The Qianlong Emperor's armor was far away in France. Displayed at Les Invalides in France, the armor was looted from the Old Summer Palace by British and French forces in 1860. Through Lang Shining's "Qianlong Parade Picture", we can imagine the grand occasion when the emperor inspected. Sadly, however, the emperor did not expect that this set of armor representing the supreme imperial power would be stolen by two robbers 60 years after his death. In the list of Yuanmingyuan spoils published by the London Times in 1861, this set of armor stood out. In the burning French Yuanmingyuan, the Anglo-French coalition forces transported a large number of imperial armor, porcelain and artworks to the palace built by Louis XIV.

On the other side of the ocean, Louis XIV's ambitions were no more than a century old, Louis XVI was killed by the guillotine, France ushered in a new revolution, the country took a new direction; The Qing Empire also only two generations to Daoguang and Xianfeng, the fate of the empire took a turn for the worse, signed a series of Western humiliation of the treaty.

Would Emperor Qianlong have thought that his ambition and honor would no longer be mentioned after a hundred years, not only the exquisite clothes symbolizing imperial power and status but also the difficulty of maintaining the Qing government in the wind and rain to maintain the final rule, today we can only leave beautiful paintings and lost overseas armor.

Disclosure statement

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The Reality Constraints and Enhancement Strategies of College Students' Network Social Mentalities

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Abstract:

In the digital age, college students, as an important group in the network society, the healthy development of their network society mentality has a far-reaching impact on personal growth, social stability and even the future of the country. Faced with a complex environment such as information explosion, network culture diversity and value collision, college students are prone to encounter challenges such as cognitive limitations, psychological imbalance, emotional fluctuations and value confusion in the network space. Therefore, this paper aims to explore a series of intervention strategies, aiming to optimize the online social mentality of college students and promote the formation of correct network cognition, healthy mental state, positive network behavior and a strong sense of social responsibility.

Keywords:

College students
Network social mentality
Strategy

1. Introduction

With the rapid development of the Internet field, the network social mentality is increasingly highlighted as a key part of the overall social mentality. In essence, it is the concentrated embodiment of the psychological state and social emotion naturally revealed by netizens in the unique virtual environment of the Internet. As the core active group of the network society, college students' ideas, behavior patterns and social ways are being deeply shaped and influenced by the network culture. Network culture has provided unprecedented learning resources and social platforms with its massive information, instant communication and rich entertainment forms for college students. However, this process is also accompanied by information overload, network violence, value conflict and other problems, which have a complex and far-reaching impact on the social mentality of college students. Network culture has played a positive role in promoting college students' self-awareness, and personalized development, and encouraging self-expression and innovation. However, at the same time, the cognitive load brought by the information explosion, the

violence and prejudice in cyberspace, and the confusion caused by the collision of multiple values can also easily lead to negative emotions such as anxiety, confusion and loneliness among college students. Therefore, the construction of college students' positive network social mentality of students is a key field that cannot be ignored in college education and talent cultivation and has inestimable value for maintaining the harmony and stability of students' mental health and promoting comprehensive development.

2. Multi-dimensional perspective of college students' network social mentality

Network society and real society coexist in mutual construction, network social mobility characteristics are more distinct, rapid response to real society, lead to the formation of network social mentality more complex, network social mentality is a multi-dimensional complex system, covers the network social cognition, emotions, values and behavior tendency and so on multiple levels.

In the network of social cognition, college students with widely accepted multicultural edification, skilled use of network technology, the further development of critical thinking and increasing social responsibility, show the complex network ecology and realistic society high insight and deep understanding, this cognition not only shaped the individual in cyberspace and positive attitude, but also inspired the social sense of responsibility and mission. Although college students are positive on the whole, some students are easy to be confused in the screening of network information, and they are vulnerable to rumors and negative information, leading to negative cognition, and thus failing to fully fulfill their social responsibilities in practical actions.

At the level of online social emotions, due to information overload, the anonymity of online social networking, the collision of multiple values and other reasons, college students experience the rapid transformation of various emotions from excitement to anxiety, from optimism to depression, from identity to confusion and so on, showing the complex and changeable emotional experience.

In terms of the construction of network social values,

given the deepening of education, the diversification of information access channels and the accumulation of social experience, college students show a high degree of self-restraint and moral consciousness, can maintain rational judgment in the complicated network events, and distinguish right from wrong, good and evil. However, in the process of transforming cognition and values into practical actions, there is still a large room for improvement, especially in terms of paying attention to online hot spots, participating in public welfare activities, and rationally dealing with network conflicts.

Therefore, although college students have shown high cognition and value maturity in the construction of network social mentality, they still need to make further efforts and improve when transforming these positive mentalities into practical actions. It is of great significance to comprehensively understand and deeply analyze the value implication and realistic dilemma of college students' network social mentality to cultivate their self-esteem, self-confidence, and rational, peaceful positive network social mentality.

3. Practical dilemmas and challenges

In the wave of the new era, college students, as the backbone of the network society, their healthy development of the network social mentality has a far-reaching impact on personal growth, social harmony and even the future of the country. However, college students are facing a series of practical difficulties and challenges in the mentality of network society.

3.1. The phenomenon of "cocoon room": The invisible shackles of college students' network social mentality

Under the background of highly development of modern information technology, the deep integration of algorithms and big data is profoundly changing the network information acquisition mode of college students. Although the wide application of personalized recommendation systems and information filtering mechanisms has greatly improved the convenience and pertinacity of information acquisition, it has virtually constructed an "information cocoon room," which closely covers college students in the narrow information

field closely related to their interests [1]. This one-sided nature of information acquisition not only aggravates the limitation and misunderstanding of cognition, hinders the ability of college students to form a comprehensive and objective cognitive world, but also makes students tend to homogenize their values and lack of necessary diversified perspectives and inclusive mentality. At the same time, in the relatively closed network community, the phenomenon of network group polarization is becoming more intense, which increases the risk of extreme expression and behavior, and poses a threat to the healthy development of its network social mentality that cannot be ignored.

3.2. Life comparison and distorted perception of fairness: Psychological disequilibrium induced by online display

In today's digital age, social media and online platforms have been firmly integrated into individuals' daily lives, and have become an important carrier of information dissemination and social interaction. For college students, the network platform has become a window for them to share their lives and observe everything in the world. It not only connects individuals with the world but also becomes an important stage for shaping and displaying the "ideal self." Therefore, the life display of individuals on the network platform is often carefully planned and beautified, presenting an idealized life picture beyond reality. In this environment, college students tend to have a comparative mentality, comparing their own lives with the "perfect life" of others. However, this comparison is often one-sided and not objective. Some students are easy to have a sense of injustice and anxiety in the frequent comparison of online life. This distorted sense of fairness affects their objective self-evaluation system and the development of social cognition [2].

3.3. Frailty of emotional management ability: Psychological challenges under the impact of negative information

College students are in a critical period of transition from emotional susceptibility to stability. Emotion shows distinct polarization characteristics, which are full of vitality and easy to fluctuate. In the massive and rapidly changing network information, college students tend to

adopt the "cultural fast food" learning method and quickly absorb a wide range of knowledge fragments. Although this breadth of learning improves students' knowledge, it often lacks depth. At the same time, these messages are filled with all kinds of emotional content, from fierce controversy to extreme speech, all of which test the emotional management ability of college students. Many college students, because the mind is not fully mature, in the face of negative information, is particularly fragile, it is difficult to effectively adjust their emotions, and they easily into mood swings, the emotional instability is not only easy to cause college students network addiction, anxiety, depression, and other psychological problems, also affect the emotional expression in real life and interpersonal processing [3].

3.4. Confused network public opinion environment: Difficult to distinguish the authenticity of information and value-oriented confusion

The diversity and openness of the network public opinion field provide a broad platform for college students to exchange information, but at the same time, it also brings the problems of difficulty in distinguishing the authenticity of information and frequent conflicts of opinions. When college students participate in online discussions, they are often faced with a complex and changeable information environment. At the level of information screening, college students are often easily drawn by false information and bad public opinion due to the lack of sufficient identification ability and unconsciously become the disseminator of network rumors [4]. At the same time, the interweaving of different views and voices also makes students feel confused, this confusion not only affects the judgment and decision-making ability of college students but also may harm the formation and stability of their values.

3.5. Lack of network literacy and responsibility: The weakness of social responsibility and security awareness

Under the influence of individualism, the trend of some college students have a vague cognition of social responsibility and lack the necessary spirit of responsibility and dedication. The Internet, as a platform

for young people to make a wide voice, interact and participate in multi-group discussions, has quietly spawned the "bystander effect," that is, college students are keen on browsing, forwarding and commenting on all kinds of information in cyberspace, but rarely think about how to contribute their efforts to solve problems, let alone bear the risks or responsibilities that may bring. This lack of responsibility not only hinders the improvement of personal character and the improvement of social adaptability but also weakens the overall cohesion and centripetal force of the society. In terms of security awareness, college students for the protection of personal privacy and network fraud prevention, often fail to fully realize the complexity and danger of the network environment, lack of necessary vigilance, and self-protection awareness, making personal information security faces a serious threat [5].

3.6. Coping with the challenge mentality differentiation: Positive and negative psychological situation

In the face of uncertainties and many challenges in the network society, the mentality of college students shows an obvious trend of differentiation [6]. On the one hand, some students show a tenacious and positive attitude, dare to face difficulties, are good at looking for opportunities from challenges, and constantly improve their self-adaptability and internal motivation. On the other hand, some students lack effective coping strategies in the complex network society and fall into a state of negativity, escape or confusion. Some choose to "lie flat," avoid all challenges and competition, and voluntarily give up the opportunity to grow. Some people fall into the "inner volume" anxiety, excessive pursuit of competition and achievement, ignoring the real needs of the heart and the balance of life. Still, others hold a "Buddha-system" attitude, seemingly indifferent to everything, and avoid facing the pressure and challenges of reality; What is more, they take the extreme way of "putting down" and completely give up their efforts, allowing their lives to fall into chaos and disorder.

The negative mentality derived from the network society not only becomes a stumbling block on the path of personal growth of college students, hindering the full play of their potential and the overall improvement of

their comprehensive quality but also produces negative effects that cannot be ignored on the surrounding students and even the entire social environment through the mutual influence between groups.

3.7. The gap between theory and practice: The lack and limitation of knowledge transformation ability

From the perspective of the participation of network behavior, the complexity of college students' mentality is particularly significant when facing the dilemma of knowledge transformation. On the one hand, he actively devoted himself to every corner of the network society and is eager to show himself and contribute his value to the network platform. He shows a strong willingness and responsibility to participate in commenting on hot events, participating in public welfare activities, learning new knowledge, and rationally dealing with network conflicts. However, in the process of trying to transform theoretical knowledge into practical actions, due to the lack of necessary practical training and teamwork experience, it is difficult to effectively transform theoretical knowledge into the ability to solve practical problems, encountering frustration and powerlessness. This imbalance of mentality limits the development of college students' ability and the excavation of their growth potential and affects the cultivation of their sense of social responsibility and mission.

4. Intervention strategies to optimize the network social mentality of college students

College students face many challenges in the network society, such as cognitive limitations, psychological imbalance, emotional fluctuations, value confusion, lack of social responsibility, mentality differentiation, and the disconnection between theory and practice. Therefore, optimizing the development of college students' network mentality is the key task of network ideological and political education.

4.1. Break the information cocoon room and promote diversified communication

The school regularly recommends diversified information

platforms and resources to students, including but not limited to news websites, academic databases, and multi-viewpoint accounts on social media, guiding students to pay attention to information sources in different fields and with different viewpoints, reducing dependence on a single platform and avoiding the formation of information cocoons.

Cross-circle communication activities were organized through the combination of online and offline methods, interdisciplinary and cross-cultural communication activities are organized, so that students can have the opportunity to contact people and ideas in different fields, broaden their horizons, and enhance inclusiveness.

4.2. Build the true self and cultivate diversified cognition

(1) Establish a correct sense of self-awareness
College students are encouraged to know themselves in various ways, including self-reflection and participation in social practice. Help students build a self-evaluation system based on their actual situation, rather than just relying solely on comparisons on the Internet.

(2) Cultivate the consciousness of "virtual and real symbiosis"
To guide college students to realize the nature of interdependence and mutual influence between the online world and the real world, to understand the truth and fiction of the online display content, and to master the strategy of achieving a balance between the virtual and the real world.

4.3. Strengthen emotional management and psychological resilience training

(1) Build an emotion management education system
Emotional management should be incorporated into the university education curriculum system, and teaching should be carried out through professional courses, general courses or elective courses, and mental health education activities related to emotion management should be carried out to help students master effective emotional regulation methods and enhance their

psychological resilience.

(2) Establish a mental health support system
Focus on strengthening the professional construction of the school psychological counseling center, make full use of big data network psychological platform to monitor and analyze students 'network emotional expression in real-time, and accurately grasp students' psychological dynamics, to provide timely and personalized psychological support services, to ensure that student's mental health is fully guaranteed

4.4. Enhance the information screening and critical thinking ability

(1) Strengthen critical thinking training
Through classroom discussion, case analysis, role-playing and other teaching methods, students are encouraged to develop the ability of independent thinking and independent judgment, avoid blindly following and drifting with the flow, to hold a prudent and rational attitude towards network information.

(2) Identify and cultivate college student opinion leaders in the network circle
Through data analysis, social network analysis and other means of accurate positioning, combined with online and offline ways to in-depth understanding of their value orientation and ideological dynamics, implement targeted ideological and political education and guidance, to ensure that their social mentality is highly unified with the mainstream social mentality. We will build a communication platform between opinion leaders and mainstream society and government agencies so that they can closely follow social hot spots and policy guidance, and better play a leading role.

4.5. Strengthen value education and strengthen network supervision

(1) Strengthen education and guidance on values
Colleges and universities should be socialist core values education as the core content of college students' ideological and political education,

through classroom teaching, practice, campus culture, and other forms, guide students to set up the correct world outlook, the outlook on life and values, improve students' moral cognition and judgment ability, enhance their ability to distinguish right from wrong, good and evil, beauty and ugliness, to form a healthy social mentality to lay a solid foundation. Strengthen the network moral education, improve the self-restraint ability of college students' network behavior, reduce the negative impact of the group polarization phenomenon, and lay a solid foundation for the construction of a harmonious network space.

(2) Strengthen network supervision [1]

Face network circles under the background of mainstream media construction, pay attention to the influence of the short video platform, production conform to the mainstream ideology and the content of popular with college students, and relying on the youth idol, youth leaders, in Weibo, WeChat, TikTok, etc., including education, employment, culture, strengthen the values of students navigation, from the source to curb bad social mentality, firmly grasp the public opinion main position, build a positive network environment for college students.

4.6. Strengthen the sense of social responsibility and the spirit of responsibility

(1) To carry out social practice activities

Organize students to participate in voluntary service, social surveys and other practical activities, so that students can feel the importance of social responsibility in practice, and cultivate their sense of social responsibility and sense of responsibility.

(2) Strengthen the sense of responsibility for education and publicity

Use campus media, network platforms and other communication channels to widely publicize the importance and significance of social responsibility, and guide college students to realize that their words and deeds in cyberspace are not only related to personal image but also related to social harmony and stability, to enhance their sense of network responsibility. Students are encouraged to actively participate in the governance and maintenance of online communities, such as reporting bad information and participating in online public welfare activities, to contribute to the construction of a clear cyberspace.

Disclosure statement

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Research on the Implementation Status and Path of "Course Technology Integration" in Art Courses for Preschool Education Majors in Colleges and Universities

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Abstract:

The preschool education major in universities carries the responsibility of cultivating preschool education talents, and art courses are an important carrier for cultivating art skills, which are related to the development of students' professional abilities and career adaptability. The integration of curriculum and technology emphasizes the combination of curriculum teaching and vocational skills, highlights vocational adaptation orientation, effectively connects teaching activities with job work, and provides targeted guidance for teaching. Currently, although early childhood education majors in universities generally recognize the importance of "integrating curriculum and technology," there are still problems in the implementation process. This article briefly analyzes the connotation of "integration of curriculum and technology," explains the current situation of "integration of curriculum and technology" in preschool education majors in universities, and explores implementation paths to improve the quality of art course teaching and talent cultivation in preschool education majors.

1. Introduction

The integration of curriculum and technology emphasizes the combination of teaching activities and skill literacy. Against the backdrop of gradually increasing talent requirements, the integration of curriculum and technology has received more attention from universities. Taking preschool education as an example, with the reform of preschool education, the entry threshold for teachers is becoming increasingly high, and art skills are one of them. Pre-school education in universities should actively promote the integration of curriculum and technology, explore implementation strategies for art courses in the new era, and cultivate more high-quality art talents.

2. The connotation of "integration of curriculum and technology" in art courses for preschool education majors in universities

The integration of curriculum and technology is a new model that conforms to modern educational concepts, emphasizing the combination of curriculum teaching and job practice, and simultaneously enhancing students' skills and employment competitiveness. Under the background of "integration of curriculum and technology," students can clarify their learning goals and obtain vocational qualification certification, enhancing their competitiveness in employment. Universities can also seamlessly connect classrooms and workplaces, enabling students to acquire the ability to engage in work while improving the efficiency of educational resource allocation [1].

3. The current situation of implementing the integration of curriculum and technology in art courses for preschool education majors in universities

3.1. Unreasonable setting of teaching content

The integration of curriculum and technology emphasizes the connection between teaching content and skills and focuses on the cultivation of professional skills. The current art teaching content of preschool education majors in universities is not reasonable enough, the skill factors are not prominent and lack foresight, which is disconnected from the actual requirements of preschool education institutions. The teaching mode lacks a tracking mechanism, which makes it difficult to provide timely feedback on skill changes in preschool education and reduces teaching effectiveness.

3.2. Insufficient competitive factors in the teaching mode

Under the background of preschool education reform, the professional requirements for art teachers are also higher. Various professional competitions are gradually being launched, integrating the latest job requirements. However, universities have not realized the importance of skill competitions, there is insufficient innovation in educational standards, students cannot access the latest skill requirements, and the integration of curriculum and technology is not accurately oriented [2].

3.3. The standardization effect of teaching is not significant

Currently, qualification certification is being implemented in many fields, reflecting the industry standards of the new era. The art curriculum of preschool education majors in universities is not closely related to vocational qualification certification, and teaching activities lack guidance on certification qualifications, which cannot comprehensively exercise students' art professional skills and restrict their development.

4. The implementation path of "Course Technology Integration" in ART COURSES FOR preschool education majors in colleges and universities

4.1. Set teaching content based on job requirements

Under the integration of curriculum and technology, course teaching should be tailored to the actual needs of the job, enhance the pertinence of the subject curriculum system, and enable students to directly meet the practical needs of the job, facilitating smooth adaptation to the job environment and realizing their value after graduation. In the teaching of art courses in preschool education with the integration of curriculum and technology, the curriculum system should be designed based on job requirements. Schools should closely communicate with preschool education institutions to clarify the art skills, teaching methods, and behavioral skills required by current preschool teachers. Subsequently, analyze the above requirements, extract skills related to art education, including painting, handicrafts, digital art, etc., and adjust course content based on the analysis results. If preschool education institutions generally use information technology to carry out teaching activities, art courses should add information technology-related teaching content, such as digital creation, software applications, etc. At the same time, building a modular curriculum system, designing teaching objectives for specific skills or knowledge, forming a systematic teaching model, making teaching objectives clearer, and helping students improve

their abilities. Each module includes both theoretical and practical parts, allowing students to transfer and apply their learning achievements in virtual simulation or real environments, and adapt to job requirements as soon as possible. Course design should also consider evaluation and feedback, adjust teaching content on time-based on the results of the course implementation monitoring system feedback, ensure alignment with job requirements, enhance students' employment competitiveness and career development capabilities, and improve the effectiveness of professional education [3].

Taking picture book production as an example, universities and preschool education institutions should clarify the requirements for the application of picture books in early childhood art education, such as storytelling ability, color application, etc. The course content should include basic painting skills and visual narrative techniques. Universities can set up picture book production modules to teach students skills such as color scheme selection and interface layout. Students need to analyze knowledge, extract the main elements and emotions of the story, and clarify the visual and color entry points. Subsequently, we will consider the application of color psychology in children's picture books and explore the strategy of "using colors to stimulate students' emotional responses" to make the stories more infectious. Students learn through scene drawing and digital production and understand layout and design styles through case analysis and group collaboration, enhancing children's reading experience. Finally, the project task of "Homemade Picture Books" is released. Students need to independently complete the visual design of picture books and write supporting texts, create mature books, and grasp every aspect of picture book production to prepare for their job in picture book production [4].

4.2. Capture competition factors and enhance integration effectiveness

Currently, vocational skills competitions are being carried out vigorously, guiding professional teaching. Universities organize various majors to actively participate in skills competitions, create a competitive atmosphere, and enable students to transfer and apply course knowledge to solve practical problems, showcase

their talents, and stimulate learning motivation during the competition. Under the background of "integrating curriculum and technology," universities are promoting "learning through competition," allowing students to clarify the application direction of course teaching content, develop leadership and social skills in team competitions, exercise personal stress resistance, and develop professional ethics. Schools should encourage students to participate in art competitions, including painting and art design competitions within the school, as well as high-level competitions outside the school, to showcase their talents in different competitions. Teachers should pay close attention to competition themes as an important component of curriculum teaching, and develop supporting projects and assignments. For example, teachers design competition modules, lead students to prepare competition works, provide guidance according to competition requirements, and deeply integrate competition with teaching. Schools can invite competition winners or experts to directly share their experiences with students in an online environment, allowing them to gain more inspiration and guidance. Through the above measures, the competition empowers students' art learning, encourages them to improve themselves, and develops their professional skills in art.

Taking "simple drawing modeling" as an example, schools can organize internal simple drawing competitions to encourage students to apply what they have learned in class to artistic creation. To expand students' participation space, various sub-themes can be arranged in the competition. Students can choose any one of the themes such as natural scenery, portrait, composition, etc. to participate in the competition. Teachers can arrange a module on simple drawing skills for the competition content, and teaching skills such as line application and sketching to convey visual information. Through a series of competitions such as "simulated sketching" and "timed creation," students can exercise their painting skills and enhance their ability to draw within a limited time. "Timed creation" emphasizes the implementation of tasks within a limited time frame, and exercises students' ability to think and adapt. This type of competition can be arranged in the classroom, where the teacher takes 15 minutes and allows students to choose common objects or natural scenery to create simple sketches. Schools can connect school-

level activities with in-class competitions by setting up a "timed creation" competition module, allowing teachers to select high-quality works to participate in school-level competitions, and the competition organizing committee will evaluate the winning works. Through the competition mechanism, students can transfer and apply simple drawing skills, enrich their creativity and improve their skills. They can also comprehensively view their works through different evaluation results and find breakthrough points.

4.3. Docking certificate requirements to enhance competitiveness

The "1+X" certificate system has been fully implemented in vocational education, and its relevant experience can be applied to other universities. Schools can meet certificate requirements, adjust the structure and content of course teaching, form a systematic theoretical learning, skill training, and simulated examination system, ensure that students meet the requirements of vocational qualification certification, and help students adapt to the professional environment. Schools should design course content based on the requirements of vocational qualification certificates, closely communicate and exchange with vocational qualification certification institutions, and clarify the assessment content of vocational qualifications, such as written test requirements, interview requirements, art knowledge points, art skills, curriculum plan formulation, etc., and incorporate the above knowledge and skills into the curriculum system to enhance the systematicity of art theory and practice. Teachers can design a "vocational qualification simulation interview" segment to allow students to experience the interview atmosphere and enhance their practical teaching abilities. Schools should provide diversified tutoring resources, encourage students to participate in various exams or interviews and enhance their skills and confidence. In addition, schools can integrate vocational qualification certificate certification and academic education certification mechanisms to enhance the pertinence of art education and students' employment competitiveness [5].

Taking art exams as an example, teachers should clarify the purpose of the exam, encourage students to participate in the exam and develop their career potential. Universities can offer certification exam training courses for skills in art fields such as painting, sculpture, and digital art. Teachers provide training based on the requirements of technical accuracy and creative expression in exams to strengthen students' professional skills. The training content should include both theoretical and practical aspects: the former includes art theory, color theory, art history, etc., which can serve as a decision-making basis for students' art creation. The latter focuses on skill training, such as painting technique application, carving technique training, digital technology application, and so on. By simulating exams, students can enter the exam state and clarify their strategies and time management during the exam. Taking the simulation exam of "painting skills" as an example, the teacher assigned the task of "completing natural landscape watercolor painting within two hours" to provide students with a review of sketching and watercolor skills. Students strictly follow the time requirements, use colors, and exercise their landscape drawing skills. The purpose of taking the exam is not only to obtain qualifications but more importantly, to exercise professional skills. Under high-intensity competitions, students can enhance their ability to withstand pressure and proficiently apply professional skills, which will greatly benefit their future work.

5. Conclusion

In summary, there are still certain problems with the integration of curriculum and skills in art courses for preschool education majors in universities. It is necessary to fully implement the educational policy of "integration of curriculum and skills," find the best integration point between curriculum content and skill training, ensure that curriculum design meets the requirements of kindergartens, and cultivate excellent talents that meet industry requirements and the needs of the times. Schools and teachers should reform the talent cultivation system, take the opportunity of "integrating curriculum and technology," explore the breakthrough path of art courses and even more courses, improve the quality of talent cultivation, and lay the foundation for subsequent work.

Disclosure statement

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Film Analysis of The Assassin (2015)

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Abstract:

Directed by Hou Hsiao-hsien, The Assassin redefines its conventions through an innovative treatment of time and pacing. Set during the Tang Dynasty, the film departs from traditional wuxia tropes by focusing on themes of emotion, solitude, and moral introspection, rather than relying on action-driven narratives. Its deliberate pacing, sparse dialogue, and exquisite cinematography craft a meditative atmosphere that underscores the protagonist's inner turmoil and feminist awakening. This analysis emphasizes the film's distinctive visual storytelling, which integrates Taoist principles and a philosophy of non-violence. Its historical authenticity, combined with the use of 35 mm film, immerses viewers in the rich cultural fabric of the Tang Dynasty. The character of Nie Yinniang serves as a lens through which the film critiques gender roles and patriarchal norms. Her refusal to engage in violence becomes a poignant expression of moral integrity and personal agency. Through a seamless fusion of cinematic realism, socio-cultural critique, and symbolic visual language, The Assassin transcends the boundaries of the martial arts genre. It offers a profound exploration of identity, morality, and the complexities of the human condition, elevating wuxia cinema to new artistic heights.

Keywords:

Cinematic realism
Feminism
Martial arts choreography
Hou Hsiao-hsien

1. Introduction

The Assassin is a striking work in the martial arts film genre. Set in 9th-century China during the Tang Dynasty, the film tells the story of an assassin who finally gives up being an assassin. This film challenges the traditional martial arts paradigm, questions the stereotype of traditional martial arts films, and leads the audience on a fascinating trip to explore the substance of homicide. The film pushes the boundaries of traditional martial arts films by probing unknown areas. In contrast to traditional martial arts films that emphasize the seriousness of fighting, The Assassin shifts its focus to emotion and loneliness, which deeply attracts the audience. Director Hou Hsiao-sien deliberately avoids the typical conventions of martial arts films, delving into the loneliness embedded in the protagonist's heart and

breaking away from established martial arts film routines. However, the innovation of the movie does not stop there. Through highly stylized cinematography techniques, sophisticated and meticulously recreated historical scenes, and characters adorned in gorgeous costumes, The Assassin immerses the audience in a world rich in cultural differences and distinct styles. Director Hou Hsiao-sien transcends the constraints of time, using deliberate and extended shots to craft a narrative that goes beyond the passage of time. Through these methods, intricate combat scenes and passionate moments are presented more deeply, providing strong support for the theme of the movie. In addition, it challenges the audience's thinking and transports them into a realm of art, allowing for intricate narratives, ingenious visual elements, and reflections on societal reality. This film offers valuable insight into the social and artistic environment of the Tang Dynasty, combining the ideas of Daoist culture to interpret the theme, especially its commentary on gender roles. This essay will explore how The Assassin is a compelling and unique martial arts film based on historical and cultural Daoist contexts, using cinematic narrative techniques and a gendered exploration of feminism.

2. Film analysis

First of all, the most notable feature of this film is that it subverts the conventions of previous martial arts films by presenting a style of martial arts film that does not merely portray martial arts action but goes deeper into portraying the heart. Unlike the passionate and fast-paced approach of previous martial arts films, stillness and slowness immerse the viewer in the story; the fight scenes are realistic but do not constitute a narrative. The Assassin's scenes use slow-motion which is indeed more emotional and fuller of impact. Every frame showcases delicate action and beautiful compositions. Slow-motion photography plays a crucial role in expressing emotions and narrative style in films, extending and deepening the audience's emotional experience of key scenes [1]. These thoughtfully paced moments intensify the emotional impact of crucial scenes. In a pivotal combat sequence, slow motion is used to emphasize the precision and grace of Nie Yinniang's martial arts skills, allowing the

audience to savor every fluid movement. This technique not only enhances the action but also adds depth to the character and her inner turmoil. In a quiet moment by a tranquil river, Nie Yinniang reflects on her inner turmoil. The camera captures her contemplative gaze as she watches a leaf float downstream. The slow, graceful movement of the leaf mirrors her inner conflict, and the scene is suffused with a sense of melancholy and longing. From the perspective of visual elements, the film transports the viewer into the narrative of the theme of loneliness through the use of long, slow, and empty shots, capturing the characters or landscapes as they are and portraying them as they are. The Assassin uses this component effectively, employing slow motion to enhance even the smallest gestures and facial expressions. For illustration, in the quiet scene where Nie Yinniang is planning on falling flowers, time seems to decelerate, allowing the audience to witness her meditative state. In this case, the use of slow motion not only extends the moment but delves into the inner feelings of the characters, creating a profound connection between the audience and the unfolding story. In action shots, the movie can start with the whirlwind, dynamic movements of the action image and then seamlessly switch to slow motion, thus extending the action time and allowing the audience to appreciate the artistry contained in the martial arts choreography.

However, director Hou Hsiao-hsien and photographer Li Pingbin paid great attention to the composition and framing of The Assassin. The most notable feature is that the director uses different forms of shading to portray Nie Yinniang's identity as an assassin. She is often hidden above the beams of the room to observe the arguments between the politicians, and the director employs overhead shots to present the assassin's viewpoint of the observed. Moreover, the most striking scene is the one in which Tian Jian and Hu Ji are talking in a room. Nie Yinniang is covered by a veil, and her blurred vision reveals the mystery of surveillance. The camera directly shows the assassin's perspective of watching and being watched. This perspective highlights the image of Nie Yiniang's character identity, she is the hidden and lonely assassin with no kindred spirits.

In fact, the film was shot on 35 mm film by a photographer, a fan of Chinese landscape paintings, who

refused to shoot digitally. It was set in China's Hubei Province to give the film an authentic and breathtaking view of the Tang Dynasty. This is apparent in the way wide-side lenses are used to capture the vast landscape, showcasing both the natural beauty of the terrain and the isolation and loneliness of the characters within their surroundings. A shot of Nie Yinniang standing alone on a towering mountain is an important illustration of this style, eliciting a deep sense of caution and loneliness, effectively featuring the film's core theme of emotional isolation. Hou Hsiao-hsien's cinematic style resonates with Bazin's notion of cinematic realism, which favors the use of long shots and long takes to preserve uninterrupted reality. These extended scenes encourage the viewer to become completely immersed in the characters' world rather than taking a direct position in the plot. As mentioned before, the candlelit discussion between Nie Yinniang and Tian Jian is a great illustration of how a long shot can intensify the emotional depth of a personal decision. As the film draws to a close, the nun and Nie Yinniang are atop a towering peak, and the natural aesthetics of time are brought into full view as time passes and clouds gradually cover the peak. Such visual language embodies the loneliness and stillness of the characters' image and echoes the loneliness of the theme. The film's daring use of long, fixed shots for extended periods achieves the ultimate in silence, placing all the visual emphasis on the image, which is significant in presenting the story's themes. Using techniques such as slow motion and long shots, The Assassin reaches the pinnacle of movie art and provides a profound and immersive viewing experience. These strategies disrupt the true course of events and allow observers to reflect on introspective moments, emotional connection, and pure beauty and its capability to tap into the inner studies of its characters.

The Assassin relies on carefully crafted visuals, combined with minimal dialogue, to convey the characters' emotions and the progression of the story. This visual storytelling approach creates a sense of immersion and allows the audience to interpret the characters' feelings and motivations through their expressions and movements. What's noticeable is that the film is quiet and spare, with visuals, editing, and the real, natural, non-diegetic sound being more valuable than language, which plays a more significant role in this film's storytelling. According to Confucius, "Music was key in cultivating the individual and bringing good governance to the state" [2]. This film maximally simplifies the plot and lines, focusing on the camera to present the characters' inner selves. The streamlining of language serves as a good representation in highlighting Nie Yinniang's character. There are only a few lines in the whole film, and language is only used to express meaningful things or to respond meaningfully to others about her inner world. The audience can obtain key information through a small amount of content. When Nie Yiniang tells the fable of the Green Luan Bird, she breaks the silence, and the softness and vulnerability of her character are completely revealed. It is this condensation and rarity of language that makes every spoken word more precious and powerful, making it irresistible for the audience to listen and realize the true emotions of the character's heart. However, the use of Guwen (Classical Chinese) places the character in a historical context, but it also brings with it the same limitation of linguistic expression. The vocabulary of 'Guwen' is small, making it difficult to express the film's rich and subtle emotional details. The overly condensed lines make the storyline lack complex linguistic explanations and dramatic narratives to tell the audience why Nie Yinniang is deeply moved by the general's son and thus decides to give up the assassination mission. To the audience, the restoration of the ancient language is obscure and difficult to understand, but it is exactly the realist film effect that director Hou Hsiao-hsien wanted to present, where the heaviness of history and the history and culture of ancient China are shown through the language of the times.

Also, The Assassin offers a refined disquisition on gender roles, a theme that resonates explosively with its feminist standpoint. In a society where Confucianism and traditional patriarchal morals dominate, the movie introduces us to Nie Yinniang, a heroine who defies convention. She's a redoubtable martial artist, an assassin, and a complex character grappling with questions of identity and purpose in a world dominated by men. As a feminist martial arts film, the movie is essentially about a failed assassination mission, and the director reflects on killing through female heroism. The film does not advocate violence but rather articulates a noble respect for

life and nature through Nie Yinniang's struggle between domestic hatred and human morality. Nie Yinniang's journey is an important commentary on the awakening of gender consciousness and subjectivity. Her fight is truly surprising and demonstrates the perseverance of women in the face of all persuasion in a society that's invariably defined by regulations. Nie Yinniang defies Confucian filial piety by refusing to kneel to her parents, challenges loyalty by refusing to kill, rejects patriarchal ideology and political violence, and liberates herself from moral and human norms, representing a strong feminist value of non-violence. Her refusal to kill as an assassin is the originality and uniqueness of this film. The Assassin dealt a heavy blow to traditional gender concepts and made people start to re-evaluate the role of women. Indeed, she has no weakness when it comes to fighting and force, but when her mother talks about all the stories from the past, Nie Yinniang hides her face and cries. She doesn't want to expose her vulnerability to the world, her soft and delicate heart contrasts with her tough exterior. Let's take a look at a scene from the movie where Nie Yinniang walks alone into the distance that she under the shade of the mountains and the trees. It precisely tells us how important women's presence is. This poignant moment is a visual representation of her journey of self-discovery, reflecting the nebulous and inflexible nature of society's expectations. The light at the end of the shade symbolizes inquiry and self-reflection, which is the direction she pursues. The women in the film are captive to political power, yet Nie Yinniang does not fall victim to politics and the like. An assassin's identity eventually gives up being an assassin. She is not a tool for killing, she only kills people she thinks are bad, demonstrating a clear sense of subjectivity. In the face of the father who plays with his young son, the husband and wife love Tian Jian, she chose to give up the mission. However, the assassin is not allowed to have emotions, which is contrary to her identity, so in the end, she chooses to leave. She sees the human feelings in the world, which is the kernel belonging to the heart of this character and where the story tension of the film lies, exploring the construction of female subject consciousness through the soft and warm image of a woman in the guise of an assassin.

Furthermore, a discussion of The Assassin reveals a deep connection between the film and its socio-cultural environment, a connection that greatly enriches its narrative. In doing so, it encourages us to consider the significance of these themes in the modern world and highlights the power of film in bridging the gap between history and reality. By immersing itself in the vibrancy of Tang Dynasty culture, embracing Daoist teachings, questioning traditional gender roles, and advocating a feminist standpoint, the movie holds a mirror to the complexities of a bygone era. During this era, Daoism wasn't merely a philosophical doctrine but also a state religion, permeating every facet of society. The Assassin masterfully captures this by weaving Daoist elements into its narrative. Its imagery echoes that of Chinese visual presentations dating from the Tang Dynasty to the Ming Dynasty [3]. The director refused to use special effects for the religious theological scenes, such as the smoke of witchcraft, and the cinematographer, drawing on the oriental aesthetics of Chinese landscape paintings, set the film in the real Chinese mountains and fields. Most of the empty shots present the beauty of the scenery, and the Daoist culture of tranquillity and nature complement each other. More specifically, the Daoist concept of "wu-wei" (non-action) resonates throughout the film, underscoring the importance of aligning with the natural order. The serene mountain settings, where Nie Yinniang hones her martial skills and contemplates her actions, are imbued with Daoist ideals of purity, harmony, and spiritual enlightenment. The concept of "jianghu" (literally 'rivers and lakes') and the characteristics of different martial arts skills portrayed in wuxia cinema also play a role [4]. Through a scrupulous reconstruction of the Tang Dynasty, the movie offers a window into a bygone period, prompting reflection on the contemporary applicability of literal themes. It delves into the Daoist ethos that permeated this period, emphasizing the significance of incorporeal chastity and alignment with the natural order. It is also worth mentioning that the film is more about showing the inner activities of the characters through hints. Political metaphors are buried under the art form, and political struggles are undercurrents. The film's ancient setting of China's Tang Dynasty, a distant historical period, avoids the sharp edges of modern political sensitivity. However, it is still not difficult to see that the pull of the clans and the centralized power symbolize the delicate relationship between mainland

China and Taiwan. Nie Yinniang chose to leave and stay out of the political fray, and the director is also articulating his artistic and political stance through the film.

3. Conclusion

In summary, The Assassin stands out as an innovative film that not only mesmerizes viewers with its stunning visual style and technological advancements but also delves into its sociocultural implications. Director Hou Hsiao-hsien and cinematographer Mark Lee Ping Bin's meticulous approach to cinematography effectively transports the audience to the era of the Tang Dynasty. The use of wide shots to capture the magnificence of landscapes, the intentional employment of slow motion to enhance emotional impact, and the reliance on visual storytelling with minimal dialogue all contribute to the movie's immersive visual experience. Nie Yinniang's female self-awareness highlights the theme of non-violence and portrays a unique female warrior. The film's technological advancements, encompassing its cinematographic techniques and integration of Daoist symbolism, exemplify its commitment to pushing the boundaries of cinematic art. These elements strengthen the film's primary claim that cinematography can serve as a powerful narrative tool that surpasses the limitations of traditional martial arts cinema. Finally, The Assassin is an extraordinary film that transcends limitations and expostulates convention. Its visual aesthetics, technological innovations, and socio-artistic connotations provide movie enthusiasts with a daedal frame to interpret. As we bid farewell to this mesmerizing cinematic odyssey, we can't help but recall that the movie's impact extends beyond narrative capabilities to carry its ability to inspire study, drive change, and establish a continuing presence in the social environment.

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An Applied Study of Classroom Questioning Techniques in Junior Middle School English Teaching

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Abstract:

Scientific and efficient classroom questioning can improve students' concentration and stimulate their interest in learning, and students can give teachers timely teaching feedback by answering questions. Therefore, in the process of junior middle school English teaching, classroom questioning is an important part of the whole teaching process. To some extent, teachers' questioning level will directly impact the teaching effect of the whole class. This paper mainly discusses the skills of classroom questioning in junior middle school English teaching, expounds on the importance of classroom questioning, summarizes the types and opportunities of classroom questioning, takes full account of students' differences, and effectively evaluates students' performance in answering questions in class.

1. The importance of classroom questioning in junior high school English teaching

In junior middle school English classroom teaching, questioning is an important means to attract students' attention and stimulate their interest in learning, and to test their learning effect in real time. Scientific and efficient questioning can promote the development of students' oral English expression ability and thinking abilities, thus improving the effect of English classroom teaching and promoting the development of students' core

quality of English subjects [1]. Specifically, the importance of classroom questioning in junior high school English teaching is mainly reflected in the following aspects:

(1) Improve students' classroom concentration

Teachers' questions in class can attract students' attention to the learning content, stimulate students' curiosity and thirst for knowledge through questions, and further enhance their learning interests. Students follow the teacher's questions to think, express their views, and follow the teacher's teaching progress. Teachers

effectively control the rhythm of classroom teaching by asking questions, strengthen the cooperation between teachers and students by asking questions, and improve the quality of English classroom teaching.

(2) Real-time feedback on the learning effect of students

Teachers ask students questions according to the teaching objectives and content of the textbooks, and the quality of students' answers to the questions is a direct feedback of their learning effect. Teachers can timely understand students' understanding and application ability of knowledge points such as words, grammar and sentence patterns, find out students' problems in the learning process, adjust teaching strategies in time, or provide targeted explanations to students.

(3) Promote the development of students' English core quality

The new curriculum standards emphasize the development of students' core literacy. Classroom questioning can promote the development of students' thinking ability and oral English expression ability, to promote the development of students' core literacy of English subjects. To answer the teacher's questions, students need to analyze, judge and reason the questions based on the classroom learning content and mobilize the existing knowledge and experience, to accurately answer the questions [2]. This process is also a process to enhance students' thinking agility and logic and cultivate students' ability to think independently and solve problems. In addition, teachers' questions also provide students with more opportunities to use English for oral expression. When students answer questions in English, teachers can understand whether students' pronunciation is inaccurate and whether the control of intonation and speech speed is reasonable, and can help students improve their oral expression.

2. The skills of classroom questioning in junior high school English teaching

Only high-quality classroom questioning can improve students' learning focus and promote the development of their core English literacy. Otherwise, it can only be gilding the lily. Based on my teaching experience, the study summarizes the following classroom questioning techniques:

2.1. Design rich types of questions

Although they are all questions, different types of questions have different effects on classroom teaching, and different types of questions can prevent students from losing interest in answering questions because of the sameness of questions. The types of questions applicable to middle school English classes include the following.

2.1.1. Lead-in questions

The introduction question is usually applied at the beginning of English classroom teaching activities, which can introduce the teaching content of this class, guide students to focus their attention on the class quickly, and stimulate their learning interest [3]. Efficient introduction questions can guide students to mobilize their existing knowledge and experience, knowledge reserves, and help students gain new knowledge through questioning. For example, in the lesson "Unit 6 Topic 1 Section A" in the second volume of seventh grade English of Ren' ai Junior High School, the study first showed a house to the students with PPT, and then asked the question: "Can you guess whose home it is?" Since many students have watched the cartoon "Peppa Pig," it is easy to guess it, and then the teacher asks the students again according to their mastery of the knowledge point of "be doing" : "Let's find out who they are and what they are doing in the rooms ?" Presents the learning theme of learning the names of different rooms for the new course. This kind of leading-in question can not only help students review old knowledge, but also stimulate their desire to explore new knowledge and guide students to think actively.

2.1.2. Open questions

The new curriculum standards require that junior high school English education should not only guide students to master more English knowledge, but also help students

to improve their English application ability through independent exploration and promote the development of their logical thinking [4]. The wide and comprehensive answers to open questions can help students break the boundaries of thinking, guide them to think deeply, stimulate creativity, deepen understanding of problems and knowledge points, and strengthen their sense of learning experience and achievement. Therefore, teachers can design more open questions in English class to encourage students to think positively and answer bravely. For example, when learning the second volume "Unit 7 Food Festival" of the eighth grade of Ren 'ai Junior High School English Edition, the author asked the students questions after explaining the content of the text: "Do you know what food festivals in different countries are like?" This question mainly guides students to analyze the differences of food culture in different countries and strengthens students' cultural awareness. For example, learning Ren 'ai version of junior high school English seventh grade volume "Unit 7 The birthday party" one hour, the teacher first set the birthday party theme situation, and then ask: "What is your birthday wish? "Students are encouraged to actively answer questions based on their own understanding of birthday parties." In the whole process, students can not only further master the key knowledge of this unit, but also activate the classroom atmosphere, and truly apply what they have learned.

2.1.3. Summary questions

Summary questions are mainly used to check the situation of students receiving classroom knowledge, help students consolidate knowledge, guide students to think and analyze according to the teacher's summary and check the gaps. Summary questions require a certain degree of malleability, which can not only reduce students' homework burden but also stimulate students' thinking interest. For example, when learning The seventh grade of Ren' ai Junior High School English "Unit 8 The Seasons and the Weather," the study put forward the following questions: "It rains a lot, but it is sometimes hot, what is the season?" When answering questions, students will also summarize and review the seasonal characteristics of "summer"; "Or" The season is very windy, but many plants are starting to sprout, what season is it? Summary

questions can enable students to participate in dialogue consciously and accumulate rich language experience [5].

2.2. Be good at grasping the opportunity to ask questions

In addition to the rich types of questions, the right opportunity is also an important factor to ensure the effectiveness of questions. If you ask questions properly, you can get twice the result with half the effort. Teachers should pay attention to the "key points" in English classroom teaching and truly involve students in the problem situation [6].

(1) Teachers should find out the interests of prospective students

For example, students can observe the illustrations in the textbook, give full play to their imagination, and ask questions according to the illustrations of the textbook to reduce the pressure on students to answer questions.

(2) Considering the help of classroom teaching divergence points

Divergence points refer to the knowledge points that can cause students' divergent thinking. Teachers' open questions on knowledge points can not only deepen students' understanding of knowledge points but also exercise students' divergent thinking and improve their creativity. Thirdly, students recognize the contradictions. When students learn new knowledge, there may be conflicts with their existing knowledge system. Teachers can timely raise questions after finding the cognitive contradictions of students [7]. This opportunity for questioning can give full play to the role of students' personal experience, promote the development of students' horizontal and vertical thinking, and realize the organic integration of theoretical knowledge learning and application. Improve students' ability to use knowledge to solve practical problems.

(3) Focus on knowledge aggregation points

Aggregation points usually refer to the issues that both students and teachers are concerned about or the central idea of the teaching content. Teachers should design diversified questions based on the knowledge aggregation points, and

incorporate the main idea of the textbook content into the questions. For example, hot topics can be introduced by asking questions, which can not only improve the participation of students but also encourage students to have deeper thinking [8].

2.3. Hierarchical questioning respects individual differences of students

When students reach the junior high school stage, their English level usually varies greatly. Students vary in their learning ability and interest in English subjects. Therefore, junior high school English classroom teaching should fully respect the individual differences of students, and teaching strategies should be able to adapt to students at different levels [9–10]. For students with a relatively weak foundation, the questions mainly focus on basic knowledge, which mainly plays a role in strengthening and consolidating. For students with a good foundation, we can put forward comprehension questions to deepen their understanding of knowledge. For students with strong learning abilities and a solid English foundation, open questions can be designed to expand their thinking development and encourage critical thinking and creative expression. For example, when learning the content of Unit 2 Keeping Healthy, Volume 1 of the eighth grade of the Ren'ai Junior High School English Edition, teachers can ask students with weak foundations: "What's the meaning of 'disease'?" to check students' knowledge of this lesson. For students with a good foundation, the question can be asked: "Why is it important to keep healthy?" to guide them to more in-depth thinking and analysis. The question for students with strong learning ability is: "How can we keep healthy in our daily life?" Further, improve the ability of such students to apply English knowledge to solve practical problems [11–12].

2.4. Give an objective evaluation of students' performance

If the process of students answering questions is the real-time feedback of teachers' teaching effect, then teachers' objective evaluation of students' performance in answering questions is the feedback to students. Reasonable and effective feedback between teachers and students can not only improve students' learning initiative and make them gain more sense of achievement in learning, but also create a more harmonious relationship between teachers and students. For students' evaluation feedback, it should be conducive to creating a harmonious and pleasant teaching atmosphere, and encourage students to take the initiative to ask questions and discuss.

(1) Teachers should give more positive praise [13]
    Praise is the affirmation of students' ability and can make students feel a sense of achievement in learning. Targeted praise can provide students with a clear direction and encourage them to go further.

(2) Quote students' words
    Quoting students' words can make students feel the recognition of teachers, stimulate their interest in active thinking, and strengthen their learning self-confidence. Moreover, quoting students' opinions can increase the opportunity for students to use the English output language, which is better than verbal praise.

(3) Give students appropriate encouragement [14]
    When students encounter problems that they do not know, or when some students dare not answer the questions, teachers can encourage students to have the courage to express themselves, so that students can understand that language mistakes and language difficulties are inevitable, and enhance their confidence in expression [15]. Encouragement can be verbal, physical, or eye, the teacher depends on the actual situation of the student.

3. Conclusion

In short, questioning skills are an important part of junior high school English teaching, an important strategy to ensure students' concentration and stimulate students' interest in learning, and an effective means for teachers to obtain students' feedback. In addition, high-quality classroom questioning can further promote students' thinking ability and language expression abilities, so teachers should pay full attention to the application of classroom questioning skills. In daily teaching, it is necessary to fully understand the actual situation of students, dig deep into the content of textbooks, flexibly adjust teaching strategies, constantly innovate the

methods and types of questions, identify the key points of questions, further develop the core quality of students' English subjects and improve their comprehensive English application ability.

Disclosure statement

The author declares no conflict of interest.

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