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CONTENTS

Exploration of the Implementation Path of Ideological and Political Education in the Course of "Political Economy" for the Integration of Common Prosperity

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Abstract: Political economy, as an important component of Marxist theory, has rich ideological and political content. However, in the past, due to limitations in teaching concepts and methods, its ideological and political functions were not fully utilized. This article analyzes the current situation and challenges of the integration of common prosperity and Marxist political economy, draws on Leibovitz's theory of demand primacy, proposes the R-E-D model, which is the linkage model of productivity production relations demand, and designs ideological and political teaching objectives and content, aiming to stimulate students' interest in learning, enhance their theoretical literacy, and achieve the goal of "three pronged education". This article aims to integrate the discourse of common prosperity into the ideological and political education of political economy courses, stimulate students' interest in learning, improve their theoretical literacy and ideological and political consciousness, and achieve the educational goal of "three pronged education".

Keywords: political economy; Common prosperity; Integration path; Course Ideology and Politics

1. INTRODUCTION

In May 2020, the Ministry of Education issued the "Guidelines for the Construction of Ideological and Political Education in Higher Education Curriculum", proposing that comprehensively promoting the construction of ideological and political education in curriculum is a strategic measure to implement the fundamental task of cultivating morality and talents. This points out that in addition to ideological and political theory courses, the teaching objectives of other courses in universities should not only impart knowledge and cultivate abilities, but also establish ideological and political goals, and play an important role in guiding students' political positions and values.[1] Marxist political economy is one of the three major theories of Marxist theory, and it itself has rich ideological and political content in the curriculum. However, as the course is positioned as a fundamental course in economics and management, the focus of teaching is not on ideological and political aspects, but rather on the reasoning and interpretation of economic theories. The teaching philosophy is outdated, and the

criticism of the capitalist system is simplified and pedagogical, resulting in insufficient appeal to students and low enthusiasm for learning.[2] Through model optimization and curriculum reform, this paper introduces the triangular relationship of productivity production relationship demand (R-E-D model), combines Marxist economic theory with China's economic policy and the socialist economic thought with Chinese characteristics in the new era, realizes the Chinese path to modernization of Marxist theory, makes the theoretical content glow with the vitality of the times, stimulates students' interest in learning, improves students' theoretical literacy, and achieves the educational goal of "educating people in three aspects".[3]

2. MECHANISM FOR INTEGRATING COMMON PROSPERITY INTO CURRICULUM IDEOLOGY AND POLITICS

There is still a lack of connection between the integration of common prosperity and classical Marxist political economy theory, which is also a difficult point for students to understand. It is necessary to analyze the production relations distribution wage labor. However, in the classic "Capital", Marx's analysis and explanation of theories such as "the need for capital growth", "productive labor of capital", and "surplus value" are very sufficient, but the analysis and explanation of wage labor are relatively weak.[4] Michael A & Lebowitz, a renowned left-wing scholar in the West and honorary professor at Simon Fraser University in Canada, provides a comprehensive criticism of the determinism of productive forces in his book "Beyond Capital: Marx's Political Economy of the Working Class". He advocates replacing it with the primacy of human needs and emphasizes the necessity for workers to unite with capitalists in class struggle. Regarding the primacy of human needs in Leibovitch, Miao, pointed out in her article that Leibovitch, from the perspective of workers, fully embodies the initiative and revolution of the working class, and to some extent awakens the missing class consciousness. Moreover, real wage labor not only includes wage workers during working hours from a capital perspective, but also includes wage workers during non working hours. These concepts indicate that Leibovitz constructs a political economy about workers from a human perspective, a human scale, and the perspective of workers' development needs.[5] Yu ,elaborated in her article that in the political economy of capital, needs are treated as an abstract economic term, and individual workers are seen as carriers of special economic relations. In the political economy of the working class, human needs are the primary purpose of production, distribution, exchange, and consumption, and workers are engaged in economic activities and pursue their own development through economic activities.[6] Of course, the academic community has also criticized Leibovitch's theory of the primacy of needs. Tai &Li pointed out that Leibovitch's subjective research method deviates from Marx's materialist view of history, and relying on the initiative of the working class cannot escape utopian fantasies, with a strong reformist color. And Wang systematically criticized the flaws of Leibovitch's theory from the perspectives of the need for primacy and the collapse of capitalism.[7]

Although there are significant controversies and flaws in Leibovitch's research methods regarding the need for primacy and the fantasy of relying on the active alliance of the working class to achieve their political demands, it cannot be denied that his research is still worth considering from the perspective of employing workers the important role that workers play in the economic cycle, especially through the logical construction of production relations distribution needs. This elucidates the importance of common prosperity and its integration into classical Marxist political economy, forming a socialist economic theory with Chinese characteristics.[8]

3. DRAWING ON DEMAND VARIABLES TO IMPROVE THE THEORETICAL SYSTEM WITH CHINESE CHARACTERISTICS

3.1 Definition of needs and connotation of requirements

Leibovitch's understanding of needs highlights the subjectivity of research methods, therefore it is necessary to first clearly define needs and their connotations, correct and shift towards Marx's materialist view of history. Need is a broad and fundamental concept that refers to the desire or demand for something that people have in order to satisfy a certain physiological or psychological need. Needs are the premise and foundation of demand generation, but not all needs can be transformed into economic needs, as payment capacity also needs to be considered. Therefore, it is necessary to improve Leibovitch's needs determinism by incorporating the theory of common prosperity into the curriculum through the use of demand variables.

3.2 Mechanism of production relations reacting to productivity through demand

3.2.1 Logical connection between production relations and demand

The connection between production relations and

distribution. In a narrow sense, production relations refer to ownership, which is the economic relationship between people and the means of production in social production. It is the foundation of production relations, determining people's status and interrelationships in production, as well as the form of product distribution. In a society with public ownership of the means of production, the means of production are owned by society or collectives, and therefore products are also owned and distributed by society or collectives. In a society of private ownership of the means of production, the exploiting class, by virtue of their ownership of the means of production, acquires the fruits of labor created by the workers without working, while the working class is in a position of exploitation and gains little from their own labor.[9] Different forms of ownership will lead to different distribution methods. In a public ownership society, the distribution method is usually based on labor and follows the principle of distribution according to work. In a private ownership society, the distribution method is more influenced by market mechanisms and capital forces, often leading to the widening of the wealth gap. The relationship between allocation and demand. A reasonable distribution relationship can ensure that the basic living needs of members of society are met. For example, through initial allocation and redistribution mechanisms, the government can ensure that lowincome groups receive necessary living security, such minimum living allowance, unemployment as insurance, etc., in order to meet their basic survival needs. With the development of the economy and the progress of society, the demands of members of society are constantly increasing.[10] A reasonable distribution relationship can motivate people to work hard, improve production efficiency, and thereby increase social wealth. These riches are used through distribution mechanisms to meet people's higher-level needs, such as education, healthcare, cultural entertainment, etc., thereby improving people's quality of life. The principle of fairness in distribution relationships is crucial for meeting the needs of members of society. When the distribution relationship reflects fairness, social members can feel the fairness and justice of society, thereby enhancing their sense of identity and belonging to society. This sense of identity and belonging helps to stimulate people's enthusiasm and creativity, further promoting social development and progress.

3.2.2 The connection between demand and productivity

Keynes' theory of diminishing marginal consumption was proposed by the British economist Keynes in his book "General Theory of Employment, Interest, and Money". This theory suggests that as income increases, although people will increase their consumption, the rate of consumption increase will be slower than the rate of income increase, that is, the marginal propensity to consume decreases. Keynes believed that due to diminishing marginal propensity to consume, the rate of consumption growth cannot keep up with the rate of income growth, resulting in insufficient consumption. Meanwhile, due to factors such as diminishing marginal efficiency of capital and flow preferences, investment demand also appears insufficient. These two aspects work together to make the effective demand (i.e. total demand) of society lower than the level of demand required for full employment. Insufficient effective demand directly leads to unsold goods and overproduction, and enterprises face the risk of production cuts, shutdowns, and even bankruptcy, which in turn triggers economic crises.

From Keynes' analysis of the causes of economic crises, combined with his theory of diminishing marginal consumption, it can be seen that effective social demand constrains the development of productivity. An economic crisis is a crisis of relative overproduction, where the goods produced by society appear to be in surplus relative to the demand of the working people who have the ability to pay, that is, overcapacity.

3.3 Construction of R-E-D model and integration of ideological and political education for common prosperity

From the analysis above, it can be seen that through the logical relationship reasoning of the chain of production relations ownership of means of production distribution demand, and combined with the application of Keynes' theory of diminishing marginal consumption in economic crises, production relations have achieved a constraining effect on the development of productive forces through demand. The emergence of this logical relationship is very helpful for students to effectively understand Marx's classic discourse in political economy, which states that the relations of production have a reciprocal effect on productive forces, and vividly solves the problem of overly textual descriptions. In addition, in order to facilitate students' understanding and memory of this logical relationship, the triangular relationship of productivity, production relations and demand is more visualized, and the theory of productivity, relationship and demand linkage relationship is summarized, which further rationalizes the integration of the relationship between the three and the important discourse of common prosperity, and realizes the Chinese path to modernization of traditional Marxist theory. According to each link, we look for a case that is suitable for the ideological and political teaching of political economy. The first letter of the three is RED, and the special significance of red for Chinese culture. Based on this theory, we design the "China Red" model, as shown in Figure 1.

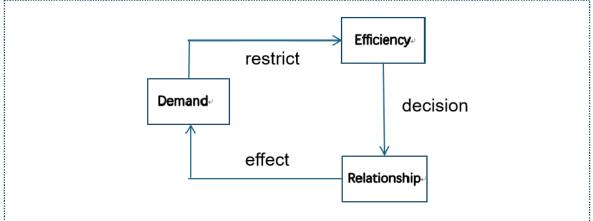


Figure 1 R-E-D Model

The advantage of this model is that, through the previous logical argument, students can prove by themselves that under the capitalist production relations, the limited distribution of capitalists and the post distribution of the working class will inevitably lead to the accumulation of wealth in the bourgeoisie, while the actual purchasing power of the working class continues to decline, and the effective demand of the society is insufficient. Finally, they cannot overcome the overproduction and lead to the capitalist economic crisis. To overcome the inevitable collapse of capitalism, according to Keynes' theory of diminishing marginal consumption, it is necessary to make the distribution of the entire society more balanced in order to maximize effective demand, and in a sense,

more balanced social distribution is the ultimate result of common prosperity.

4. CONSTRUCTION AND IMPROVEMENT OF THE PATH OF INTEGRATING THE 4 R-E-D MODEL WITH COMMON PROSPERITY IN POLITICAL ECONOMY

4.1 Design of integration with common prosperity content in political economy curriculum

To this end, based on the curriculum of political economy, the main content and key knowledge points of the political economy course are summarized, and the ideological values and elements contained therein are deeply explored. By introducing the R-E-D model, the mapping relationship between key content and ideological elements is constructed. Production relations affect demand through distribution relations. Firstly, clearly define the concepts of "production relations", "distribution relations", and "demand". Production relations refer to the social relationships formed by people in the process of material production. They are the social form of the mode of production, including the ownership of the means of production, people's status and relationships in production, and the distribution of products. The distribution relationship refers to how social products are distributed to members of society, including initial distribution, redistribution, etc. Demand refers to the desire and ability of consumers to purchase a certain product or service within a certain period of time. The R-E-D model emphasizes the decisive role of the ownership form of the means of production in the distribution relationship. For example, in capitalist society, private ownership of the means of production leads to capitalists owning the majority of surplus value, and workers can only receive wages; In socialist society, public ownership of the means of production enables workers to participate in the distribution of the fruits of production; Explain how distribution relationships affect demand by influencing consumers' income levels, consumption structures, and consumption psychology. Select representative cases from both domestic and international sources for analysis, such as examining the impact of a country's distribution policies on the needs of its social members during different historical periods.

The bottleneck effect of demand on productivity. In economics, demand usually refers to the quantity of goods or services that consumers are willing and able to purchase within a certain period of time and at a certain price level. Productivity is the ability of humans to utilize nature, transform nature, and produce material resources, usually manifested as social productivity, that is, the ability of people to produce material resources. It is an aspect of the mode of production. Emphasizing that demand is one of the driving forces of production. The changes in market demand will guide enterprises to adjust their production direction, scale, and structure to adapt to market changes. Combining the R-E-D model to analyze how demand becomes a bottleneck for productivity development when there is insufficient demand or an unreasonable demand structure. For example, when market demand is saturated or consumers lose interest in certain products, the production of these products may be limited, resulting in the inability of related industries to fully utilize their productivity. Select historical or real-life cases, such as the automotive industry, electronics industry, etc., and analyze how demand affects the development of productivity during a specific period. For example, the rise of new energy vehicles has driven technological innovation and capacity expansion in related industry chains; The saturation of the smartphone market has led to some manufacturers facing problems of overproduction and inventory backlog.

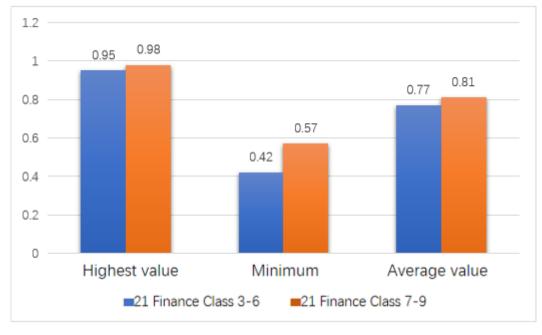
4.2 Evaluation and feedback of ideological and political education in political economy courses

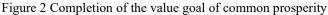
The evaluation and feedback mechanism of ideological and political education in courses is closely centered around established teaching objectives and content, and is a key step in comprehensively measuring the effectiveness of ideological and political education in terms of knowledge transmission depth, ability cultivation breadth, and value shaping height. For the ideological and political evaluation of political economy courses, we should adhere to the concept of student development as the core, integrate process evaluation and summative assessment, balance personalized characteristics and standardized standards, focus on the evaluation of student learning outcomes, deeply explore the connotation of outcomes, pay attention to individual learning growth, and strive to drive continuous optimization and improvement of teaching quality through evaluation results.

To achieve this goal, we need to rely on our school's teaching evaluation system, creatively integrate ideological and political elements into the evaluation system, and construct a closed-loop comprehensive evaluation system for the effectiveness of ideological and political education in political economy courses, covering "establishment of evaluation standards selection of evaluation methods - operation of evaluation mechanisms - evaluation reflection iteration". This system aims to accurately identify and correct deficiencies in the ideological and political education system through continuous selfexamination.

5. CONCLUSION AND CONTINUOUS IMPROVEMENT

In teaching practice, through the comparison between the experimental group (classes 7-9, totaling 108 students) and the control group (classes 3-6, totaling 156 students) of the undergraduate finance class in the 21st grade, it can be clearly seen that the experimental group using the R-E-D model (i.e. the productivity production relations demand linkage model) performs better in the analysis of common prosperity related case problems. Specifically, the experimental group achieved a highest score of 0.98, a lowest score of 0.57, and an average score of 0.81, demonstrating a high overall level and a relatively balanced score distribution. The control group had a highest score of 0.95, a lowest score of 0.42, and an average score of 0.77. Although there were also high scores, both the lowest and average scores were lower than those of the experimental group, and the score distribution was more dispersed, as shown in Figure 2.





In terms of future continuous renovation, the first step is to continuously strengthen the theoretical depth and breadth. Although the R-E-D model provides students with a clear framework, there is still a need to further deepen their understanding of the classic theories of Marxist political economy in practical applications, especially in elaborating on some complex concepts and principles. Extra curricular reading materials can be appropriately increased to guide students to read more relevant literature, broaden their horizons, and enhance their theoretical literacy. Optimize case selection, further screen and optimize cases to ensure their timeliness and representativeness, while emphasizing the close integration of cases with theoretical knowledge. Introduce more practical cases from both domestic and international sources to help students understand the experiences and lessons learned from different countries and regions in common prosperity. Improve the promoting evaluation system, further optimize the evaluation system for ideological and political education in courses, and ensure the objectivity and impartiality of the evaluation results. In addition to the case analysis questions in the final exam, it is also possible to consider introducing more evaluation methods, such as daily assignments, group discussions, oral presentations, etc., to comprehensively assess students' learning outcomes.

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Research on Teaching Reform and Innovation of the Course "Innovation and Entrepreneurship Practice" under the Background of the Integration between Industry and Education

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Abstract: The integration between production and education spans the two major systems of education and industry. It is an important starting point for forming the supply side of talent cultivation and economic transformation and upgrading, and a key link for forming new productivity of talent cultivation. As far as the current situation is concerned, the integration between production and education is not widely used in the course of Innovation and Entrepreneurship Practice in colleges and universities, nor does it occupy a dominant position in teaching. Moreover, the teaching methods of teachers of innovation and entrepreneurship practice are relatively single, so it is difficult to carry out large-scale teaching reform and practice under this mode. Aiming at the existing problems, this paper puts forward the ways and methods of teaching reform of innovation and entrepreneurship practice course under the background of integration between production and education.

Keywords: the integration between industry and education; Innovation and entrepreneurship practices; Teaching reform

1. INTRODUCTION

Since the proposal of "widespread entrepreneurship and innovation" in 2014, universities have actively out innovation and entrepreneurship carried education. Gradually strengthen innovation and entrepreneurship education and training for college students, promote the entrepreneurship mentorship system in universities across the country, and include innovation and entrepreneurship education and practical courses in the compulsory course system of universities; Support universities and vocational colleges to deepen the integration between industry and education, and introduce enterprises to carry out productive internships and practical training. Integrating innovation and entrepreneurship education with professional education, opening up a

new talent cultivation model, optimizing the structure of talent quality, cultivating innovative talents that adapt to the characteristics of the new era, injecting vitality into higher education, and driving innovation in universities. With the continuous deepening of global economic integration, innovation and entrepreneurship have become important driving forces for promoting economic and social development. In order to cultivate talents with innovative spirit and entrepreneurial ability, countries have increased their investment and support for innovation and entrepreneurship education. In this context, the reform of innovation and entrepreneurship practice courses is particularly important^[1].

2. THE IMPORTANCE OF THE INTEGRATION BETWEEN INDUSTRY AND EDUCATION IN THE TEACHING OF "INNOVATION AND ENTREPRENEURSHIP PRACTICE" COURSE

The integration between industry and education refers to the in-depth cooperation between educational institutions (usually schools) and industry. The purpose is to integrate the actual needs and experiences of industry into the teaching process, thereby improving the quality and efficiency of education. The integration between production and education can take many forms, including but not limited to internship training, work-study alternation, order training, co-construction of laboratories or R&D centers, Industry-University-Research cooperation projects, etc. This method not only enables students to gain a learning experience closer to practical work, but also provides enterprises with the opportunity to directly contact potential employees, and promotes the construction of a bridge between academic research and industrial application^[2].

For students, the first is to improve their employment competitiveness: through the integration between production and education, students can get in touch with the latest industry trends and technological developments, which enables them to adapt to the

workplace environment more quickly after graduation. The second is to enhance practical skills: the integration between production and education usually includes practical learning activities, such as enterprise internships, project cooperation, etc. These activities help students master practical skills and transform theoretical knowledge into the ability to solve practical problems. The third is to cultivate professional quality: in the process of cooperating with enterprises, students can learn the professional ethics, teamwork ability and communication skills required in the workplace, which are indispensable parts of their future careers. For teachers, the first is to promote the innovation of teaching methods: close cooperation with enterprises urges teachers to constantly explore new teaching methods, integrate industry best practices into classroom teaching, and improve teaching quality. The second is to strengthen industry ties: the integration between production and education helps teachers to understand the cutting-edge technologies and development trends of the industry, which is not only conducive to the update of curriculum content, but also broadens teachers research horizons. The third is to improve personal career development: cooperation with enterprises may also provide more career development opportunities for teachers, such as participating in consulting projects of enterprises and serving as consultants.

At present, the talent cultivation of the "Innovation and Entrepreneurship Practice" course has significantly lagged behind the requirements of the integration between industry and education, and the reform and innovation of course teaching are urgently needed. How to effectively overcome the difficulties and problems in the past development process of "Innovation and Entrepreneurship Practice", so that the course can better adapt to the era of industry education integration, requires in-depth exploration^[3]. 3. CURRENT SITUATION AND EXISTING PROBLEMS OF THE COURSE OF "INNOVATION AND ENTREPRENEURSHIP PRACTICE"

(1) Current status of the course "Innovation and Entrepreneurship Practice"

Universities are the base for cultivating talents. In recent years, various majors in universities have offered innovation and entrepreneurship courses. However. of the innovation most and entrepreneurship courses offered by majors belong to general innovation and entrepreneurship courses, which are not closely integrated with professional courses. The content related to innovation and entrepreneurship courses learned by students cannot be effectively integrated with current professional courses. At present, there are many problems with the innovation and entrepreneurship courses offered by most universities.

(2) Problems existing in the course of "Innovation and Entrepreneurship Practice"

Professional education is disconnected from innovation and entrepreneurship education. Professional education is inseparable from innovation and entrepreneurship education, and innovation and entrepreneurship separated from professional education are also not conducive to the cultivation of students innovative quality and entrepreneurial ability, which complement each other. At present, innovative courses pay attention to theory, lack of connection with majors, can't fully stimulate students enthusiasm for innovation and entrepreneurship, and it is difficult to achieve the expected educational goals. Innovation and entrepreneurship education under the background of the integration between production and education is not simply to train innovative thinking and cultivate entrepreneurial ability, but to integrate professional curriculum content into the teaching process, so as to realize the true integration between specialization and innovation. At present, professional education in colleges and universities pays more attention to students mastery of professional knowledge and skills, and does not integrate the knowledge and practice related to innovation and entrepreneurship. Although students have a certain understanding of innovation and entrepreneurship knowledge and ideas, they cannot effectively integrate innovation and entrepreneurship ideas with related professional knowledge^[4].

Curriculum construction standards and teaching effectiveness evaluation are not perfect. At present, the curriculum teaching demonstration group has not been Based on the overall situation, built the comprehensive evaluation standard of applied undergraduate "Innovation and Entrepreneurship Practice" course teaching under the background of integration between production and education is not perfect from the five-in-one evaluation of students, teachers, schools, peers and society, and the multiple guarantee system of teaching effectiveness evaluation and supervision system is still lacking. The teaching evaluation system, such as the teaching supervision mechanism, is not perfect, and it is still in the exploratory stage. As a result, although students have excellent academic performance, they are difficult to be competent in practical work. Therefore, it is necessary to formulate more scientific and comprehensive evaluation standards to better adapt to market demand and industrial development.

The talent training model is rigid and insufficient innovation. At present, in the process of innovation and entrepreneurship education in colleges and universities, the traditional training mode is still the main one, and insufficient attention is paid to innovation and entrepreneurship practice education in talent training. It only combines professional courses and properly integrates some theoretical contents of innovation and entrepreneurship education, but does not develop practical courses, market innovation economy development trends, entrepreneurship experience and lessons, etc., so it is impossible to implement effective innovation and entrepreneurship education practice guidance for students, and students innovation and entrepreneurship ability cultivation is impacted in the process of learning professional knowledge. The course teaching of Innovation and Entrepreneurship Practice is a course with strong combination of theory and practice. However, from the specific teaching, it is found that teachers seldom connect theory with practice when teaching the course content, and students practical operation ability is relatively weak. The practice of many colleges and universities still stays on the surface, mainly reflected in curriculum setting, teaching content, practice training and so on. If these links are not optimized, it will inevitably affect the quality and effect of classroom teaching. In order to effectively improve the teaching quality, we need to pay more attention to the teaching innovation. Only by carrying out teaching activities with students as the center can we achieve the teaching goal^[5].

Traditional teaching methods cannot meet the requirements of industry-education integration courses. Under the trend of teaching reform of integration between production and education, the traditional teaching mode can't meet the needs of cultivating innovative talents. At present, the innovation and entrepreneurship courses carried out by colleges and universities still adopt traditional teaching methods, students lack the opportunity and ability of independent exploration, and students participation in the classroom is low.^[6] Traditional teaching methods lack systematic teaching evaluation, take teachers as the center, ignore students dominant position, and lack two-way communication between teachers and students. In most cases, students passively accept the knowledge imparted by teachers. The course "Innovation and Entrepreneurship Practice" requires teachers to achieve comprehensive communication with students, with students as the main body, teachers guide students to discuss, and encourage students to complete the transmission of teaching content from the perspective of students. Therefore, the traditional teaching methods can't meet the requirements of the curriculum construction of "Innovation and Entrepreneurship Practice" under the current background of integration between production and education due to single teaching methods, backward teaching methods and imperfect teaching evaluation.

The assessment method is not comprehensive and unscientific. The traditional course assessment method of "Innovation and Entrepreneurship Practice" is often based on written examination, which mainly examines students mastery of theoretical knowledge. However, "Innovation and Entrepreneurship Practice" is a highly practical subject, and it is impossible to comprehensively evaluate students practical ability and problem-solving ability only through written examination. The lack of assessment of practical links leads students to ignore the importance of practical application in course study, and can't effectively apply what they have learned to practical problems. At present, the course assessment method of Innovation and Entrepreneurship Practice often adopts a single written test form, which lacks diversity and flexibility. This assessment method can't comprehensively evaluate students knowledge mastery, skill application and attitude performance. At the same time, due to the single assessment method, students often only accept the assessment passively, lacking initiative and innovation. "Innovation and Entrepreneurship Practice" is a discipline that is constantly changing with the changes of market environment and enterprise practices. However, the current assessment methods often lack updates that keep pace with the times. The assessment content is often limited to traditional entrepreneurial theories and methods, and cant reflect the changes and trends of the current market, which makes students lack coping ability and innovative thinking when facing practical problems^[7].

4. THE REFORM AND INNOVATION PATH OF THE COURSE "INNOVATION AND ENTREPRENEURSHIP PRACTICE" UNDER THE BACKGROUND OF THE INTEGRATION BETWEEN INDUSTRY AND EDUCATION

(1) Deepen the school-enterprise cooperation mechanism

School-enterprise cooperation is one of the core modes of the integration between production and education. Through the close cooperation between schools and enterprises, it jointly promotes the teaching reform of the course of Innovation and Entrepreneurship Practice^[8].

First, cooperate to build a school-enterprise training base. Both schools and enterprises jointly invest in the construction of training bases to simulate the real industrial environment and provide students with a platform for practical operation. For example, jointly build "Innovation and Entrepreneurship Incubation Park" and "Zhongchuang Space", so that students can experience the entrepreneurial process and accumulate entrepreneurial experience in a real entrepreneurial environment. On the one hand, by establishing an innovation and entrepreneurship education practice base on campus, guiding students to set up companies and providing independently. students with professional teacher guidance services, students can intuitively understand the operation of enterprises, understand the management ideas of enterprises, and master the organizational structure and daily management of enterprises; On the other hand, by guiding students to participate in multiple levels of college students entrepreneurial projects and organizing students to study in enterprises, students entrepreneurial initiative can be improved in a progressive way; Of course, schools can also develop off-campus students entrepreneurial practice bases, maintain cooperation with enterprises, organize students to go deep into their posts to feel a strong entrepreneurial atmosphere, and promote the improvement of students entrepreneurial practice ability.

The second is to jointly formulate talent training programs. Colleges and universities and enterprises jointly formulate talent training programs according to industrial needs to ensure that the teaching content is closely connected with the actual industry. Both parties participate in curriculum design, textbook compilation, teaching implementation and other links to ensure that students can master cutting-edge knowledge and skills in the industry.

The third is to carry out the implementation of the enterprise mentor system. Combine inside and outside the school to establish a high-quality "double-qualified" innovative education teacher team. In the new era, the team of college students innovation and entrepreneurship instructors should be equipped with professional teachers to continuously improve the curriculum quality. Invite enterprise experts, technical backbones, etc. as part-time teachers or course tutors to deeply participate in the of the course "Innovation teaching and Entrepreneurship Practice". Enterprise tutors can not only impart practical experience and technical skills, but also further provide students with help in career planning and entrepreneurial guidance.

(2) Develop curriculum based on task orientation

The course "Innovation and Entrepreneurship Practice" is based on task-oriented development curriculum, which means that the design and implementation of the course will closely focus on the actual innovation and entrepreneurship tasks. This development method emphasizes practicality and application, which helps students to better understand and apply theoretical knowledge related to entrepreneurship and management, and improve their ability to solve practical problems. First, determine the course objectives. Define the core competencies to be cultivated in the course, such as identification of entrepreneurial opportunities, types of entrepreneurial risks, selection of entrepreneurial projects and writing of business plans, etc. These competencies should be closely related to the actual work needs of innovation and entrepreneurship. Second, design teaching tasks. According to the curriculum objectives, design a series of teaching tasks. For example, for business plan writing, case analysis, group discussion and other methods can be used. Third, organize practical activities. In order to enable students to better apply what they have learned, some practical activities can be organized, which should be linked with teaching tasks, so that students can deepen their understanding of innovation and entrepreneurship in practice. The development of task-oriented innovation and entrepreneurship practice curriculum is helpful to

stimulate students learning interest and initiative, and improve their practical ability and innovative ability^[9]. (3) Give full play to the leading role of innovation and better implement the integration between production and education

The integration between industry and education refers to the in-depth cooperation between industry and education, aiming at cultivating high-quality talents that meet market demand. Innovation plays a vital role in the integration between production and education, and can promote changes in educational models, curriculum contents, teaching methods, etc., so as to better meet the needs of economic and social development. Through innovative educational concepts, integration mode of production and education, curriculum system and teaching methods, talent training mechanism, and measures to strengthen policy support and international exchanges and cooperation, we can promote the continuous and in-depth development of integration between production and education, and provide strong talent support and intellectual guarantee for economic and social development.[10]

5. CONCLUSION

Innovation and entrepreneurship practice course belongs to the core component of innovation and entrepreneurship education system in colleges and universities, which can help students form innovative spirit and entrepreneurial ability. Under the background of deepening the integration between production and education, the traditional educational concepts, teaching contents and teaching methods basically can't meet the actual needs of innovation and entrepreneurship courses, so it is necessary to innovate them to improve the teaching quality of innovation and entrepreneurship practice courses, so as to give full play to the supporting role of integration between production and education and educate people, and make college students innovation and entrepreneurship practice ability be efficiently cultivated and exercised.

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Comparative Study on the Phonetic Features of Poetry Reading and Recitation

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Abstract: This article investigates and analyzes the phonetic data of 20 poems read and recited by four speakers, and analyzes the rhythm and melody characteristics of reading and recitation, as well as the methods of recitation. The analysis results indicate that recitation has stronger rhythm and melody characteristics than reading aloud. In the recitation of five character modern style poetry, each sentence has three beats, while in the recitation of seven character modern style poetry, each sentence has four beats. The length of the beats alternates between long and short, presenting the characteristics of "flat long with short tones" and "flat low with high tones". The final characters of the five character and seven character contemporary poetry recitation, regardless of their tone, have a "dragging tone", forming a unique charm of ancient poetry recitation. Reciting each sentence has ups and downs in pitch and melody, and sentence structures with the same pitch, tone, and rhythm have similar pitch and melody patterns. The basic method of recitation is to follow the characteristics of "flat long, flat short" and "flat low, flat high", with five characters and three beats, seven characters and four beats, and trailing notes at the end of the sentence. The same melody pattern is used for the same flat and flat tones.

Keywords: Poetry reading; Poetry recitation; Speech analysis; Phonetic Feature; Poetry analysis

1. INTRODUCTION

China is a country of poetry, and Zhejiang is one of the important birthplaces of Tang poetry. In 2018, the Zhejiang Provincial Government proposed to build the "East Zhejiang Tang Poetry Road", which closely integrates Tang poetry research with Zhejiang's regional culture. Recitation is closely related to Tang poetry, just as Du Fu said, "New poetry should be transformed into long recitations." Recitation is a classical poetry recitation method that falls between "singing" and "reading," with a rhythmic and unique melodic tone. Reciting is not only an important way to appreciate poetry, but also an important means of creating poetry, and it is now a national intangible cultural heritage. As Mr. Wang Li said in "Ten Lectures on Poetry and Rhythm", "Poetry is not written for viewing, but for chanting.

Recitation is a traditional method of reciting classical poetry, as described by Lu Xun in private school teaching, which involves "shaking the head and tail" to read ancient poetry and prose. The earliest scholar to record, organize, and study recitation was linguist Mr. Zhao Yuanren [1]. As early as 1925, Mr. Zhao Yuanren recorded his 11 Changzhou dialect recitations using a wire recorder in the United States and wrote multiple research papers on recitation, which were included in the book "Zhao Yuanren's Music Essays Collection" [2]. Mr. Zhao Yuanren defined recitation as "improvising a melody based on the tone of a character, rather than strictly following the tone to produce a completely unchanged melody [3].

The research on recitation is mainly conducted from the perspectives of linguistics and music. Scholars such as Wang Enbao, Chen Shaosong, Qin Dexiang, and Xu Jianshun have conducted in-depth research on recitation from a literary perspective [4]. recitation summarizing the methods and characteristics of recitation tones in ancient poetry, prose, and other literary genres. Ye Jiaying believes in "On the Aesthetic Characteristics of Chinese Old Poetry and the Tradition of Recitation" that recitability is one of the important features of classical Chinese poetry, and recitation is also an important method for us to study the beauty of ancient Chinese culture [5]. Zhao Minli's "On the Language based Characteristics of Traditional Recitation" discusses that the tone of recitation is determined by the phonetics, tones, and tones of Chinese characters, and that traditional recitation is essentially an art of language [6]. Xu Jianshun's "On the Basic Methods of Recitation" elaborates in detail on the methods of recitation from six aspects: "flat length, narrow tone, short tone", "following the characters and singing style", "literary reading and pronunciation", and "vocal singing style"[4]. Yang Feng etc. analyzed over 100 reading and recitation works from a linguistic theoretical perspective using experimental phonetics research methods [7-10].

2. SIGNAL ACQUISITION

This article collected the phonetic data of 20 poems read and recited by four speakers, and analyzed the phonetic characteristics of poetry reading and recitation through phonetic acoustic analysis. Record a total of 20 poems, read each one aloud and recite them again.

Using microphone, mixing console, electronic glottometer (EGG) and other equipment, synchronously record two signals, with the first

recording voice signal and the second recording EGG voice signal. After the recording is completed, the data is sorted and edited, and each ancient poem is recited and saved as a file. Each file has two channels, with the left channel being the voice signal and the right channel being the EGG voice signal. Mark the syllables and steps of the recitation speech signal, calculate parameters such as syllable duration, step duration, pause duration, etc., and output the parameters to an Excel spreadsheet for statistical analysis. Extract fundamental frequency parameters from voice signals, smooth and normalize them, and output them to an Excel spreadsheet.

3. COMPARATIVE ANALYSIS OF PRONUNCIATION BETWEEN READING AND RECITATION

(1) Comparative Analysis of Reading and Reciting Five Character Poetry

In the recitation of five character modern poetry, the step structure consists of two syllables or three syllables at the end of the sentence, with a step structure of 2+3, while in recitation, it consists of two syllables or one syllable at the end of the sentence, with a step structure of 2+2+1. That is to say, the rhythm in five character recitation is two beats 2+3, while in recitation it is three beats 2+2+1.

In the recitation of five character modern poetry, each sentence consists of three beats, and the five characters form a 2+2+1 rhythm pattern, alternating in length and presenting the characteristic of "flat long and flat short". The following picture is a recitation of Du Fu's "Chun Wang", with the phrases "Cheng Chun/Chao Mu/Shen", "Flat/Pitch/Flat". The first beat of "Chen Chun" lasts for 2.21 seconds, which is a combination of flat and flat tones. The second character "Chun" has a duration several times longer than the previous syllable after dragging. The duration of the second beat of "Chao Mu" is 0.89 seconds, which is a combination of tones and tones. and the duration is shorter than the first beat. The third beat is composed of a single word "Shen" drag sound, with a duration of 1.67 seconds, which is longer than the second beat. Three beats form a rhythm pattern of "long+short+long".

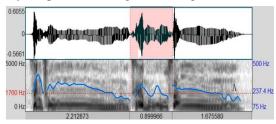


Figure 1 Waveform diagram of reciting the second sentence of " Chun Wang" in a five character modern style poem

The meter pattern of each line in the five character modern style poem is three beats, showing a characteristic of alternating length, and the words at the end of the line are all dragged. The statistical results of acoustic parameters for reciting 10 five character modern style poems. The average duration of the flat combination is 2.72 seconds, which is much longer than the average duration of the tonal combination, which is 0.87 seconds. The trailing tone of the last character alone is one beat, and the average duration is 1.62 seconds.

At the end of a sentence recited in a five character modern style poem, regardless of the tone, there is always a "drag tone". The vowel of the tone is extended, while the tone is usually formed by adding characters such as "um" and "oh" to form a "drag tone". As shown in Figure 1, the word "Shen" at the end of the sentence is a flat tone character, and the vowel is extended several times. The final character "Zai" in "Guo Po Shan He Zai" is a tone tone character, and adding the character "Oh" forms a drag tone. At the same time, in the dragging tone of the last character, there are two periods of ups and downs in the pitch, as shown in the fundamental frequency curve at point A in Figure 1, which has two periods of fluctuations, forming a long-lasting charm in ancient poetry recitation.

The pitch and melody of each sentence in the five character modern style poem have ups and downs, and the combination of pitch and rhythm presents a characteristic of "flat low, flat high". The fundamental frequency of the flat combination is 216Hz, while that of the oblique combination is 298Hz. The pitch is arranged in a staggered manner to form the melody of each sentence. The pitch of the middle part "Chao Mu" is slightly higher than the pitch of the front part "Chen CHUN" and the back part "Shen", presenting a "low+high+low" pitch melody variation pattern.

The sound intensity of each sentence in the recitation of a five character modern style poem also fluctuates, presenting the characteristic of a loud and long-lasting dragging tone at the end of the sentence. The sound intensity of the combination of tones and tones is slightly lower than that of the combination of tones. The sound intensity of the last character in the sentence is the highest, with an average of 78.7 decibels. The sound intensity of the flat combination is the lowest, at 68.1 decibels, and the sound intensity of the oblique combination is 73.4 decibels, which is higher than that of the flat combination.

The melody pattern of reciting a five character modern style poem with the same level, tone, and rhythm can be the same, and the same method can be used to recite a five character modern style poem with the same sentence structure. There are four basic sentence patterns in five character modern poetry, which can be classified into four types based on the first sentence's tone structure: the first sentence's tone start tone end tone structure, the first sentence's tone start tone end tone structure, the first sentence's tone start tone end tone structure, and the first sentence's tone start tone end tone structure. The tone format of the same type of five character quatrain and four sentences is the same, and the melody corresponding to each basic sentence pattern is consistent. The tone format of the four lines before and after the eight sentence five character modern style poem is consistent, and the melodic pattern of its recitation is also consistent. That is to say, poems with consistent patterns of tone, intonation, and rhythm have the same melodic pattern and can be recited using the same method. The pitch melody follows the pattern of "flat low, flat high", and the duration follows the combination of "flat long, flat short". In terms of sound intensity, the final character of the sentence is increased to form a longer and more melodious drag.

(2) Comparative Analysis of Reading and Reciting Seven Character Poetry

The degree of integration between syllables in the recitation and recitation of seven character modern poetry is not the same. We divide the prosodic hierarchy of seven character modern poetry based on the duration of each syllable and the duration of pauses between syllables. Firstly, we mark the starting and ending positions of each syllable and sentence, and calculate the duration of syllables and pauses between syllables. Cluster analysis is conducted on the duration of pause between syllables, and the categories of pause duration are divided into different levels of prosodic boundaries to divide the prosodic hierarchy of seven character poetry.

In the reading of seven character modern poetry, the rhythmic hierarchy is divided into four levels, with the first level being rhythmic sentences, with an average duration of 2.72 seconds. The second level is a prosodic phrase, in which a longer "Dou" appears. The prosodic sentence is divided into two prosodic phrases before and after to form a four/three structure. The average duration of this "Dou" is 0.26s, and the average duration of the prosodic phrase is 1.56s. The third level is the step, consisting of two or three syllables, with an average step duration of 0.76s and a pause between steps of 0.17s. The step structure is 2+2+3. The fourth level is syllables, and the duration of each syllable is not equal, and the length of pauses between syllables is also different. The average duration of syllables is 0.41 seconds

In the recitation of seven character modern style poetry, each sentence consists of four beats, with seven characters forming a 2+2+2+1 rhythm pattern. The four beats alternate in length, presenting the characteristic of "flat long and flat short".

Statistical analysis was conducted on the duration of the combination of flat and tonal rhythms in seven character modern poetry. Each sentence had a four beat rhythm pattern, exhibiting the characteristic of "flat and long with short tones", and the last words of the sentence were all delayed. The average duration of the flat combination is 2.32 seconds, which is several times longer than the duration of the oblique combination. The trailing tone of the last character alone is one beat, and the average duration is 1.61 seconds. Each sentence of the seven characters forms an alternating combination pattern of "short + long + short + long" or "long + short + long + short".

The recitation of seven character modern style poetry is consistent with that of five character poetry. Regardless of the tone at the end of the sentence, there is a "drag tone". The vowel of the tone tone tone is extended, while the tone tone tone is usually added with words such as "um" and "oh" to form a "drag tone", creating a unique charm for ancient poetry recitation.

Reciting a seven character modern style poem, each line has ups and downs in pitch and melody, and the combination of pitch and rhythm presents a characteristic of "low pitch and high pitch". The fundamental frequency of the flat combination is 207Hz, the tone combination is 281Hz, and the last character of the sentence is 217Hz. The pitch is arranged in a staggered manner to form the melody of each sentence.

The sound intensity of each sentence in the seven character modern style poem also fluctuates, consistent with the characteristics of the five character poem, presenting a loud and long-lasting dragging tone at the end of the sentence. The sound intensity of the combination of tones and tones is slightly lower than that of the combination of tones. The sound intensity of the last character of the sentence is the highest, with an average of 75.3 decibels. The sound intensity of the flat combination is the lowest, at 69.2 decibels, and the sound intensity of the oblique combination is 72.1 decibels, which is higher than that of the flat combination.

The seven character modern style poetry is the same as the five character one, and the melody pattern of recitation is also the same if the tone, pitch, and meter are consistent. The same melody height can be used to recite seven character modern style poetry with the same sentence structure. The tone format of the four sentences of the same type of seven character quatrains is the same, and the melody corresponding to each basic sentence structure is consistent. The tone format of the four lines before and after the eight line seven character modern style poem is consistent, and the melodic pattern of its recitation is also consistent. Seven character poems with consistent patterns of tone, intonation, and rhythm have the same melodic pattern and can be recited using the same method. Similar to the five character recitation method, the pitch melody follows the pattern of "flat low, flat high", and the duration follows the pattern of "flat long, flat short". The final character of the sentence is increased in intensity and dragged, with fluctuations in pitch during the dragging.

4. CONCLUSION

By comparing and analyzing the phonetics of reading and reciting 20 poems, the rhythm characteristics, pitch melody, intensity changes, and recitation methods of poetry reading and reciting were summarized. In the recitation of five character modern style poetry, each sentence has three beats, with five characters forming a 2+2+1 beat pattern. In the recitation of seven character modern style poetry, each sentence has four beats, with seven characters forming a 2+2+2+1 beat pattern. The three or four beats of both are alternating in length, presenting the characteristics of "flat long, flat short" and "flat low, flat high". The duration of the flat combination is several times longer than that of the flat combination. The final characters of the sentences recited in five character and seven character contemporary poetry, regardless of their tone, all have a "drag tone". The vowel of the tone tone character is extended, while the tone tone character is generally formed by adding characters such as "um" and "oh" to form a "drag tone". The drag tone has pitch fluctuations, increased intensity, and clear sound, forming a unique charm of ancient poetry recitation. In recitation, each sentence has fluctuations in pitch and melody, and sentence structures with the same pitch, tone, and rhythm have similar pitch and melody patterns.

The basic method of recitation is to follow a three beat pattern for five character modern poetry, a four beat pattern for seven character poetry, double the dragging of the last syllable of the flat combination, and add a word extension at the end of the sentence to form a single beat. The sound intensity increases to form a dragging tone. Recite according to the characteristics of "flat long, flat short" and "flat low, flat high". Sentences with consistent flat and flat formats should be recited according to the same melody height and rhythm pattern.

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