Research on The Dynamic Mode of Second Classroom Education in Higher Vocational Colleges Based on Trait Factor Theory

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Abstract: The second classroom in higher vocational colleges is an important channel to implement the fundamental task of moral education, improve the adaptability of vocational education and improve the quality of personnel training. Aiming at the current key problems of the second classroom education in higher vocational college, such as the fuzzy orientation of training objectives, the unidirectional supply of curriculum items, and the single implementation of training, this paper constructed the dynamic training mode of DLFL in the second classroom education, the dynamic evaluation mechanism of training objectives, the dynamic selection mechanism of curriculum items, and the multi-party collaborative dynamic education mechanism, thus forming a dynamic model of second classroom education based on the theory of trait factor. This is conducive to the development of students' commonness and individuality in the same direction, thus achieving everyone brilliant.

Keywords: Trait factor theory, Second classroom education, Dynamic, Education mode reform.

1. Introduction

As the main force for the high-quality development of vocational education, higher vocational colleges undertake the mission of training high-quality technical and skilled personnel, skilled craftsmen and artisans of great powers. The core point of Parsons' theory of trait factor is the match between individual and occupation. In other words, the matching degree between personal personality and professional factors is higher, and thus the individual will easily become a talent [1]. Its core idea is consistent with vocational education on "everyone can be successful and everyone can show his talents to the best of his ability". The second classroom of higher vocational colleges is an important carrier of education [2]. Exploring the dynamic mode of second classroom education based on the theory of trait factor is of great significance to promote the development of students' common personality to the same trait and achieve everyone's outstanding performance.

2. The Importance of The Second Classroom Education Reform in Higher Vocational Colleges

2.1. The Urgent Need to Implement the Fundamental Task of Moral Education

Since the 18th National Congress of the CPC, the Central Committee of the CPC has comprehensively strengthened the Party's leadership over the cause of education. Centering on the fundamental issues of who, how and for whom to train people, it has proposed that education should adhere to the fundamental task of cultivating moral and cultivating people, further strengthen ideological and political work in colleges and universities, and promote the reform and innovation of college education [3].

In the national University ideological and political work conference, General Secretary Xi Jinping pointed out that we should pay more attention to strengthen the construction of the second classroom, practice education, innovate ways and methods, expand education channels, and create more opportunities and stages for students to participate in social practice.

2.2. The Necessary Requirements for The Adaptability of Vocational Education

The national "14th Five-Year Plan", the National Vocational Education Congress and the new Vocational Education Law all emphasize "enhancing the adaptability of vocational education". Vocational education is different from general education in that it focuses on skills training, highlights employment orientation and professional skills orientation, and focuses on cultivating students' ability to choose and adapt to career changes, which makes the students get lifelong sustainable development. The structure of talent training needs to adapt to the social and economic development, to meet the needs of human resources. At present, China's economy has shifted from a stage of rapid growth to high-quality development. The industry economy present a high-level industrial base, intelligent production process, product service customization and other new features. New technologies, new industries and new forms, new economy emerge in endlessly. As an extension of the first classroom, the second classroom in higher vocational colleges urgently needs to explore a new dynamic model of education, cultivate high-quality technical and skilled talents with strong post adaptability and sustainable career development, and thus adapting to the high-quality development of the economy and society.

2.3. The Practical Need to Improve the Quality of Higher Vocational Talents Training

The new Vocational Education Law points out that the characteristics of vocational education to cultivate talents are vocational comprehensive quality and action ability. Vocational education must adhere to everyone, teaching in accordance with their aptitude. Higher vocational students...
present some contradictions on strong self-awareness and weak self-management ability, strong learning needs and week autonomous learning ability, weak abstract knowledge and strong practice ability etc. The second classroom as a personnel training important channel, is designed for students personalized dynamic development as the logical starting point, facing anyone. Respecting the principal position and personality characteristics, of students, developing courses with the characteristics of training vocational education talents, and establishing a multi-party collaborative education mechanism, is conducive to stimulate students' individual self-awareness and initiative as a consciousness, and to cultivate students in all walks of life "beauty, beauty and common", thus achieving everyone success.

3. The Connotation and Characteristics of Trait Factor Theory

The theory of trait factor is a career guidance theory formally created by Boston University professor Frank Parsons in his book Choosing a Career in 1909. Parsons is the father of career guidance, and this theory is the earliest career guidance theory [4]. Trait is a reflection of human personality, including personality, interest, ability tendency, values, etc. Factors refer to the specific requirements of the ability or qualification of the objective work. If the personal characteristics are closer to the work factors, the possibility of personal career success is greater. The core features of the theory are as follows:

3.1. Paying Attention to Personalized Training

As early as 1894, Parsons pointed out that everyone should be helped to do the work that best suits his nature. The theory holds that each person possesses a unique set of personality traits that can be objectively and effectively assessed using certain tools and methods. Different occupations have different requirements. It is necessary to equip employees who meet the occupational characteristics to achieve the greatest success. The more the practitioner's personal characteristics match the occupational characteristics, the more likely the career will be successful. In 1906, Parsons emphasized in his keynote speech "The Ideal City" that the function of realizing the ideal city is to provide scientific vocational education and career guidance for young people. The ideal city in the future can not only provide a job for young people, but more importantly, guide and help young people to learn to choose a suitable job [5]. The second classroom education in higher vocational colleges should also pay attention to the personalized development of students. The personalized guidance concept is integrate into the second classroom talent training program, which create a good education environment for the individual growth.

3.2. Focusing on Cooperation Between Government, Universities and Enterprises

In 1908, Parsons initiated the establishment of the first vocational guidance organization in the United States -- Boston Vocational Bureau, and served as the director. The agency was founded by the United States government to provide vocational guidance for young people. The Boston Career Bureau provides a practical platform for Parsons to carry out career guidance research work. During his tenure in the Boston Vocational Bureau, Parsons paid attention to the education of government, schools and enterprises when carrying out vocational guidance for young people. He fully initiated business operators, school educators, social workers and government personnel to cooperate and negotiate vocational guidance cooperation projects, so as to tap the individual potential and future job opportunities of students. In recent years, the state has issued the “Vocational Education Quality Improvement and Improvement Action Plan (2020-2023)”, “Policy documents such as the Opinions on Promoting the High-quality Development of Modern Vocational Education”, and “the New Vocational Education Law "support the linkage between government, schools, businesses and the establishment of a cooperative education mechanism. Higher vocational second classroom education should also fully cooperate with industry organizations, enterprises, institutions and form a cooperation mechanism, so as to provide a guarantee for students to fully understand their careers and improve their vocational abilities.

3.3. Paying Attention to Research, Practice and Exploration

"Three-step paradigm" is the most important method and step for individual career selection in the theory of trait factor. The first step is self-cognition, that is, analyzing individuals’ own unique personality, interest, ability, values, defects, etc. through evaluation, consultation, experience and other ways. The second step is occupational cognition, that is, understanding individuals’ ability requirements of different occupations, working environment, salary level, development prospects, etc. through data review, communication interview, internship experience and other ways. The third step is job matching, that is, optimizing the matching of characteristics and factors to achieve the goal of career selection and career development success. In order to improve the probability of successful career choice, individuals should know themselves through psychological assessment and consultation with important others on the one hand. On the other hand, they should deepen their knowledge and understanding of their career and position through data collection, investigation, analysis, and practical experience, and further improve their self-knowledge in practical experience. Higher vocational education is employment-oriented and highlights practicality. As an important practical education system in the "Ten major education systems", the second classroom in higher vocational education improves students' comprehensive quality with its rich and colorful practical activities. The industry standards, vocational requirements should be integrated into the second classroom project in Higher vocational second classroom education, providing the education environment for the dynamic development of students to create a self-understanding, understanding of the workplace, experience the occupation, learn to choose.

4. The Second Classroom Education of The Current Situation and Problem Analysis

The second classroom is an important part of the daily education in colleges and universities. The academic circle generally defines the second classroom as a variety of meaningful extracurricular activities organized and guided by students outside the teaching activities stipulated in the student's teaching plan (namely the first classroom), which is
an important supplement to the first classroom." Jointly issued by the communist youth league central committee and the Ministry of Education in 2018 about the communist youth league and the opinions of the second classroom report card system, points out that the communist youth league" report card "of the second classroom system is fully absorb the first classroom teaching education mechanism and the work system. The overall design of the communist youth league on work content, project supply, evaluation mechanism and operation mode achieve a set of work system, which can be recorded, evaluated, measured and presented by college students participating in the second classroom of the Communist Youth League. At present, the second classroom promotes the construction the scientific, systematic, institutionalized and standardized in the way of the "second classroom report card" system However, at present, there are still the following problems in the education of the second classroom in higher vocational colleges:

4.1. Fuzzy Orientation of Training Objectives and Lack of Dynamic Evaluation Mechanism

The talent training objective of the second classroom in higher vocational colleges is the premise and foundation of constructing the second classroom education mode scientifically and reasonably. At present, the orientation of the second classroom talent training goal is fuzzy. The second classroom training goal is lack of the first classroom talent training goal fit. There is no systematic and scientific talent training goal analysis and judgment like the first classroom. The objective of talent training in the second classroom of higher vocational education should simultaneously meet the social function and educational function of higher vocational education. In terms of social function, higher vocational education should cultivate high-quality technical talents with strong professional skills, career mobility and self-management ability, thus adapting to industrial transformation, upgrad and rapid career change. In terms of educational function, higher vocational education faces students with different intelligence characteristics from general education and the diverse characteristics, which needs to meet the individual personalized growth. The second classroom of higher vocational education is the expansion of the first classroom in the cultivation of students' professional ability. This is superior to richness, flexibility, diversity of the first class in professional migration force and self-management ability training. The characteristics of the talents training goal of the second classroom should be combined with that of the first class, The second classroom can dynamic evaluate its talent training objective according to the different student individual value, the potential and personality, meeting the common personality of students to peer development.

4.2. Unidirectional Curriculum Project Supply and Lack of Dynamic Selection Mechanism

At present, the construction of "second classroom curriculumization" in higher vocational colleges mainly focuses on the construction of curriculum diversification and brand. In terms of diversification, the second classroom provides a variety of curriculum projects in ideological quality development, political awareness promotion, art and sports projects, volunteer public service and other aspects. For brand construction, the second classroom combines school characteristics, regional characteristics and professional advantages to create a number of strong influence of the second classroom golden lessons, improve the teaching quality of the second classroom courses. However, the second classroom curriculum construction has a one-way supply problem, which is not based on the educational concept of "student-oriented development" and ignores the development needs of the educational subject. It is specifically reflected in the following aspects: 1. The first and second classroom is not integrated enough, which exits the defects on one-way design and implementation curriculum projects only from the perspective of the second classroom. The first class and the second class play different roles in the practice of talent training in colleges and universities. Only promoting each other can jointly play the education function, and thus build a complete education system in colleges and universities. However, the current curriculum project design lacks the effective connection of the first class and the second class, and the mechanism of course exchange and credit exchange in the second class is lacking. 2. The supply of curriculum items lacks the analysis of students' personality, career development goals, target employment ability, etc., and lacks the dynamic planning and guidance for students' learning selection of curriculum items. Students often choose courses randomly, and lack of rational and dynamic choice of course projects based on internal needs and social needs.

4.3. Single Training and Implementation and Lack of Dynamic Coordination Mechanism

The new vocational education Law clearly states that vocational education must adhere to the integration of industry and education, and school-enterprise cooperation. Vocational schools can establish cooperation mechanisms with industry organizations, enterprises and public institutions by forming vocational education groups, implementing modern apprenticeship system and other forms. Encourage industry organizations and enterprises to participate in the development of teaching materials for vocational education and the construction of practice and training bases. Enterprises may set up full-time (part-time) posts to carry out vocational education. Incentive policies such as rewards and preferential taxes shall be given to enterprises deeply involved in the integration of industry and education and cooperation between schools and enterprises. The second classroom in higher vocational colleges is an important link in talent training. At present, the curriculum design, curriculum implementation, practice base, organization and management of the second classroom are single. The curriculum design lacks joint research and development with industry organizations and enterprises. The teaching staff of curriculum implementation is not diversified, with the ideological and political team in school as the main part, and professional teachers as the auxiliary part. The participation of industry organizations and enterprise experts is less. In terms of organizational management, the Youth league committee of the school is responsible for the management, and the sub-youth league committee of the secondary college is the main management. The organization and operation are relatively independent, and there is no government-industry-enterprise-school cooperative education mechanism.
5. Construction of Dynamic Education Model in The Second Classroom of Higher Vocational Colleges

5.1. Construction the Dynamic Training Mode of DLFL In the Second Classroom Education

Talent training mode is the most direct factor affecting the quality of talent training, and its basic elements include talent training objectives, talent training specifications and training process. Based on the problems existing in the second classroom education, this paper proposes the dynamic training method of DLFL (Double levels Four links, DLFL for short) in the second classroom education (as shown in Figure 1) under the guidance of the theory of trait factor.

DLFL pointed out that the goal of talent training in the second classroom is "everyone is outstanding". As the main channel of educating people, the goal of "everyone outstanding" reflects the objective needs of social development and educational objects. It not only meets the needs of educational objects to grow into talents, but also adapts to the objective needs of social development. This promotes people's all-round development, personality development and social development.

In DLFL's second classroom education practice, “double levels” refer to the school level and the student level. As the subject and object of education, school and student depend on and transform each other. The educational subject of the second classroom is inseparable from the educational object of the second classroom. The educational process of the second classroom is a two-way dynamic movement process of the objectification of the subject and subjectization of object. The college is the undertaker, designer, initiator and implemor of the second classroom education. It is necessary to respect the subjectivity, initiative and individual difference of the education object and provide personalized guidance for the students. Students are the second classroom educatees, with autonomous initiative, creativity and plasticity. They can actively participate in and choose the practice activities of the second classroom.

Four links cover the specifications and process of talent training, which refers to the four aspects of dynamic and circular education at the school level, such as career planning service, target post analysis, career development ability training, and characteristic curriculum project construction. The college provides dynamic career planning services for students to excavate the characteristics of students, analyze the target position and the corresponding career development ability of the position. The college also constructs curriculum projects with the career development ability as the core, develops and implements individual personalized training programs, dynamically evaluates the career status of students, and continuously improves the career development ability of students. At the student level, students actively participate and act in the process of talent training in the second classroom. Under the guidance of the college, the students determine the mutual matching of the career development path and the target position through self-knowledge and workplace recognition. The career development ability is determined by the target position. Students lay down individual personalized growth plan through the "Mandatory + Optional" course project. The career development ability is spirally improved through the dynamic training of double-layer four links, realizing the transformation from "I want to learn" to "I want to learn", and promoting the common personality of students to peer development, thus achieving “everyone is outstanding”.

Figure 1. Dynamic training mode of DLFL in the second classroom education
5.2. Construction A Dynamic Evaluation Mechanism for Talent Training Objectives

The objective of talent training is the starting point and foothold of all the education work. The dynamic training method of DLFL points out that the goal of talent training in the second classroom of higher vocational colleges should be consistent with that of the first classroom, which not only meets the social function of vocational education type and the educational function, but also promotes the personalized development of students, and thus realizing "everyone is outstanding". When determining the objectives of the second classroom, it is necessary to have the macroscopic objectives of the school's second classroom as well as the microscopic objectives of individual students. On the macro-level, the school evaluates the talents training objectives of the second classroom and the first classroom jointly, and organizes experts to make dynamic adjustment and evaluation according to the needs of relevant policies, industrial structure and economic form. For example, the School of Artificial Intelligence of Wenzhou Polytechnic regularly organizes industry experts, enterprise experts, experts from teaching departments of the university and other higher vocational colleges, and experts from student work departments to jointly diagnose and evaluate talent training objectives and programs every academic year. At the micro-level, according to the "three-step paradigm" followed by individuals in the theory of idiosyncratic factors in career selection, the school sets up the second classroom student career planning and development center, which provides the following services for students: The first is career evaluation, career counseling and career group counseling of interest, character, ability and values; The second is career knowledge and experience service. For example, workplace personality interview, workplace personality lecture, workplace skills competition, workplace zero-distance experience and other projects; The third is to provide career development professional, course, career post selection and decision-making services. The school dynamically evaluates students' individual career development goals according to their needs, and provides individualized training programs for them in the second classroom according to their individual career development goals. For example, the School of Artificial Intelligence of Wenzhou Polytechnic set up a school-level student career planning and development center -- Rainbow Career Workshop to provide dynamic assessment of individual career development goals for students.

5.3. Construction A Dynamic Selection Mechanism for Curriculum Projects

The realization of dynamic selection of curriculum items in the second classroom is an important link to meet the needs of students' personalized training. The variety and hierarchy of curriculum items, the interaction and convenience of course selection provide the greatest "choice possibility" for students to dynamically choose curriculum items. According to the talent training objective of the second classroom, and combining with the curriculum design of the first classroom, the school designs the curriculum projects of the second classroom according to the logic of "post - ability - curriculum". The school analyzed the difference of vocational posts, and identified the core positions suitable for the work of higher vocational students with different characteristics, then determined the second classroom professional expansion curriculum projects and professional quality expansion curriculum projects according to the core positions. The professional development course projects cover skills competition, vocational qualification certification, enterprise post practice, innovation and entrepreneurship. Professional quality development courses include ideological and moral character, physical and mental health, culture and art, career development, and social services. The school carries out echelon cultivation of the second classroom curriculum projects, which are divided into three levels: general projects, characteristic projects and high-quality projects, to meet the selection needs of students at different levels of ability development. At the same time, it sets up the first and second class courses, the credit exchange system, the "mandatory + optional" system, and the information-based course selection system, which enables students to dynamically choose course projects according to their individual characteristics, time and space requirements. The school's second classroom student career planning and development center provides personalized guidance for students' course selection according to the logic of "trait - position - ability - course", to improve students' initiative, and help students from "unable to choose" to "smart choice".

5.4. Building A Multi-Party Collaborative and Dynamic Education Mechanism

The second classroom cooperative education mechanism was set up. First of all, the first and second class accommodation mechanism was established. Form a full participation of the second classroom education teachers. Then the second classroom education effect of professional teachers is included in the important indicators of professional teachers' Professional Title Evaluation and professional teachers' teaching performance assessment. The construction of the second class curriculum project in the charge of professional teachers is also recognized as an educational reform project. The construction of the second classroom credit system was promoted, the training requirements of the second classroom were included in the first classroom talent training program, and the courses and credits of the first and second classrooms were interchangeable. Secondly, the second classroom "government, school and enterprise" cooperative education mechanism was built. The college cooperates with the government, industry, enterprises and other organizations to build an off campus practice platform by relying on the advantages of college talent training, and thus extending the second classroom education platform. For example, Wenzhou Polytechnic has introduced large and medium-sized enterprises to participate in the "mentor-team-project" special class and order class in the second classroom, set up 12 school-enterprise cooperative order classes such as Kingdee and Aokang, and built 1016 school-enterprise training bases, providing more than 600 talents for cooperative enterprises every year. Huawei Developer Innovation Center was set up to conduct in-depth cooperation with Huawei and Sinosoft International. Enterprise engineers served as mentors. The enterprise resources and cases are used to teach Hongmeng and artificial intelligence in first Classroom and second Classroom. This fully provides students with second class social practice and internship opportunities in the Huawei ecosystem and Sinosoft International ecosystem.
In a word, as an important carrier and main position of education, the exploration of the second classroom teaching model has important theoretical value and practical significance. Based on the analysis of the relationship between students' individualized development and career based on the theory of idiosyncratic factors, combining with the analysis of the current situation of second classroom education, a scientific dynamic model of second classroom education has been reasonably and scientifically proposed, which promotes students' personality development, career development and all-round development.

Acknowledgment

Foundation Project: General Scientific Research Project of Education Department of Zhejiang Province: Research on the Dynamic Model of "Five-in-one" Education based on Trait Factor Theory (Y202148167); The Second Batch of Teaching Reform Research Project of Higher Education in Zhejiang Province during the 13th Five-Year Plan: Research on the Practice System of the Second Classroom Education from the Perspective of Career Planning "Everyone is Brilliant" (JG20190738); Wenzhou Polytechnic Curriculum Ideological and Political teaching research project: An Exploration of Curriculum Ideological and Political Reform Path Based on Cognitive Information Processing Theory -- A Case Study of Information Technology Course "College Students' Career Planning" (WZYSJG2104).

References


