

Research on the Implementation Path of "Specialty and Innovation Integration" Course in Higher Vocational Colleges

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ABSTRACT

The separation of "double innovation" education and professional education causes parallel courses between the two, which is extremely detrimental to my country's innovation-led economic development. "Specialization and integration" provides a feasible solution for the innovation and entrepreneurship courses for all students and the whole process of integrating talents. On the basis of summarizing the implementation status of "double innovation" courses, starting from the development of digital economy, "double high" plan construction and "experience-based" constructivist theories, the development trend of higher vocational "integration of specialization and innovation" courses is demonstrated. According to the "Taylor Principle", it expounds the implementation path of the "integration of specialization and innovation" from the four aspects of curriculum objectives, curriculum content, curriculum implementation and curriculum evaluation, and verifies its effectiveness in enhancing students' "double innovation" ability.

Keywords- digital economy, "convergence of specialization and innovation", curriculum implementation

1. INTRODUCTION

Innovation is the first driving force for development, entrepreneurship is an important way to expand employment, and innovation and entrepreneurship are the driving force behind the high-quality development of my country's economy. In 2019, the Ministry of Education and the Ministry of Finance officially launched a plan for the construction of high-level vocational schools and majors with Chinese characteristics. If "Chinese characteristics" is the banner of the "Double High Plan", then innovation and entrepreneurship must be the most eye-catching key on this banner word. In recent years, "double innovation" courses have been continuously promoted in higher vocational colleges, and the scale and level have been continuously expanded. However, with the advent of the digital economy era, innovation-driven is becoming the new normal of industrial development, and platform entrepreneurship has also become the consensus of everyone. The change of industrial ecology urgently needs higher vocational education to solve the "two skins" problem of innovation and entrepreneurship education and professional education, and stimulate the creativity of talent training, and "integration of

specialization and innovation" provides an effective curriculum solution for this.

2. THE IMPLEMENTATION STATUS OF "DOUBLE INNOVATION" COURSES IN HIGHER VOCATIONAL EDUCATION

With the in-depth advancement of innovation and entrepreneurship education in higher vocational colleges, the implementation of courses related to "double innovation" can be roughly divided into the following three types: The first type is based on public basic courses, such as the "Entrepreneurship Foundation" commonly offered by colleges and universities. "Innovative Thinking" and other courses [1]. Such courses aim at cultivating students' awareness of innovation and entrepreneurship and stimulating their interest in innovation and entrepreneurship. At the same time, they teach students the knowledge and skills related to innovation and entrepreneurship, so as to have a general understanding of entrepreneurial phenomena. The second type is based on projects, such as the "elite" courses offered by entrepreneurship colleges for students who are interested in entrepreneurship and with potential entrepreneurial projects. Or carry out targeted training for

the enterprises in the campus that are operating (incubating) in the school entrepreneurship (creative) park to assist them in their follow-up development [2]. The third type is based on "integration of specialization and innovation", that is, based on the connotation of innovation and entrepreneurship in a broad sense, for all students, the "double innovation" curriculum is combined with professional education and integrated into the whole process of talent training [3]. Generally speaking, such courses will incorporate innovation and entrepreneurship education into the general education of the corresponding disciplines, emphasizing the learning process, linking the characteristics and processes of innovation and entrepreneurship with professional learning, and the corresponding "broad-spectrum" Innovation and entrepreneurship concept.

3. THE BASIS FOR THE IMPLEMENTATION OF THE "SPECIALIZED CREATION INTEGRATION" CURRICULUM MODEL

3.1. The inevitable choice for the cultivation of innovative talents in the digital economy

"Professional and creative integration" is an important way to cultivate the innovative ability of higher vocational talents, and the core driving force of the development of the digital economy is innovation. Only under the premise of innovation, digital knowledge and information can be used as factors of production. Through the integration of network carriers and the real economy, the intelligence level of traditional industries can be improved, and economic development and educational organization can be reconstructed. In the transition phase from the consumer Internet to the industrial Internet, emerging digital technologies such as artificial intelligence, 5G, and cloud computing all rely on the expansion of innovative capabilities. At present, the structure of the national economy is undergoing tremendous changes. In 2018, my country's digital economy totaled 31.3 trillion yuan, accounting for more than one-third of GDP, as high as 34.8%[4]. While the digital economy is driving the development of my country's industry towards networking, platforming and intelligence, it objectively requires corresponding adjustments to the "double innovation" curriculum and the "double innovation" curriculum objectives of my country's higher vocational colleges to make corresponding adjustments. To meet the requirements of industrial development and achieve innovation-driven. However, the implementation of "double innovation" courses relying on publicly-selected courses is too simple, and the implementation of project-based "double innovation" courses is not comprehensive, which is not conducive to the cultivation of higher vocational talents' innovative ability. This situation has aggravated the talent

supply side of higher vocational schools And the contradiction between the industry demand side.

3.2. The proper path for the development of "double high" colleges and universities

"Professional and creative integration" is the course selection that should be followed in the development of "double high" in our country, and it is the basic course model for high-level vocational colleges and professional construction with Chinese characteristics. At present, my country's higher vocational education is going through a critical period from scale expansion to quality improvement. In April 2019, the Ministry of Education and the Ministry of Finance jointly issued the opinions of the "Double High" construction plan, stating that "concentrate efforts to build a group of leading reforms and support Development, Chinese characteristics, world-class vocational schools and professional groups" [5]. In the author's opinion, the goal of the "Double High" program not only clarifies the requirements for the quality development of higher vocational education, but also points out the direction of its "featured" development. The curriculum model of "integration of specialization and creativity" can precisely combine quality and characteristics. Two for one. In February 2019, the "National Vocational Education Reform Implementation Plan" pointed out that vocational education and general education are different types of education, and the fundamental difference between the two is that the development of vocational education must be connected with the development of regional industries. The qualitative nature can not only allow higher vocational education to avoid homogenous development, but also provide a realistic basis for the implementation of "specialty and innovation integration" courses.

If it is said that relying on "separation of specialization and innovation" to cultivate the ability of "double innovation" is the requirement of the era of industrial production, then "integration of specialization and innovation" is precisely the objective requirement for the migration of technology to industry in the digital economy era. The trend of "convergence of specialization and innovation" shows that the cultivation of "double innovation" ability is not only the responsibility of traditional universities, scientific research institutions, a certain industry or a single enterprise, but also a possible thing that can happen through the cooperation of the whole department, the whole industry, and the whole society. Under this circumstance, "integration of specialization and innovation" is not only a trend of "double high" curriculum reform, but also a kind of institutional arrangement to promote the comprehensive "upgrading" of innovation and entrepreneurship capabilities of higher vocational students.

4. THE IMPLEMENTATION PATH OF "SPECIALIZED CREATION AND INTEGRATION"

According to the basic principles of curriculum and teaching proposed by Taylor, this section uses the four dimensions of curriculum objectives, curriculum content, curriculum organization and curriculum evaluation as an analysis framework to discuss how to establish and implement "specialty and innovation integration" courses in higher vocational colleges.

4.1. Curriculum goal: develop value creativity

Value creativity is the ultimate goal of the "specialization and integration" course. In the traditional school education in the past, students only need to passively accept and repeat the expected answer, because the country's economic growth largely depends on physical capital or tangible capital. However, under the influence of globalization, social economic growth patterns and employment methods have undergone earth-shaking changes. The world is full of uncertainty and complexity. In addition to the rapid changes in science and technology, the country's economic growth is more driven by "creative ideas". "And "innovation value" to determine. The focus of national economic growth lies in whether it can positively affect technological upgrading in the long-term, and technological upgrading largely depends on the accumulation of talents in the regional economy. Correspondingly, talents cultivated by higher vocational colleges need to be able to acquire the ability to adapt, learn and grow in their careers, to establish new relationships and assume new roles, and this keen insight ability is "value creativity". Regardless of whether learners will choose to start a business in the future or serve all walks of life, the purpose of "specialization and integration" is to cultivate learners with the ability to create value.

In most cases where professional education occupies school education, only when innovation and entrepreneurship education is effectively integrated into professional education, can it truly be "for all students" and "integrate into the whole process of talent training". Therefore, the author keeps emphasizing the integration of specialization and innovation. "The importance of ", the purpose of "specialization and integration" is to cultivate students' value creativity. In other words, "integration of specialization and innovation" is a more effective way to guide learners to "create value" for this changeable society. "Learning'professional' while carrying out'innovation and entrepreneurship'" can be further interpreted as "learning'professional' while 'Create value'".

4.2. Course content: "sustainable development" theme content

The "triple helix" is a widely recognized theory that can effectively explain the effective model of innovation and entrepreneurship. The "triple helix" theory explains that the three organizations of the "government", "enterprise" and "university" maintain independent identities and responsibilities while maintaining independent identities and duties. In mutual influence and interaction. This is based on the theory of interpretivism. As a member of the "university" organization, students are constantly affected and affected by the entire society, economy and environment in the process of innovation and entrepreneurship, and at the same time, they also have a negative effect on the entire society, economy and environment. As emphasized by "constructivist education", "development" is the essence of education, composed of "individual experience", influenced by the external environment and external stakeholders, and adversely affecting the external world. Therefore, in the learning process, when learners discover large or small problems and try to solve the "changes" brought about by these problems, they are doing "value creation" and cultivating students' value creativity. It needs to be emphasized that the cultivation of "value creativity" is not an unattainable grand goal. All major value creation that can ultimately affect the entire society, economy and environment starts with small changes made by you, me, and him. Started. Students learn to pay attention to themselves and the world outside of themselves, starting from discovering small problems, and trying to solve these problems to change themselves and others. This is the beginning of changing the world, that is, the beginning of value creation. In fact, the initial purpose of the establishment of disciplines and majors is to change the world. Through the coordination and integration of technology, economy, resources, ecological environment and the entire society, to bring value to the entire society from different directions, this is to create the value of "sustainable development". Therefore, whether it is the United Nations "Sustainable Development Goals" that continue to guide the global development work from 2015 to 2030, or the "sustainable development" thematic directions such as "green education" and "green vocational education" that are constantly being valued and mentioned, Both can be regarded as being in the same line as the cultivation of "value creativity" and can be used as an experience of effective value creation.

In short, in "specialization and integration" education, students can be actively guided to focus on the subject of "sustainable development", allowing students to combine their majors to discover and solve problems, no matter whether the problem is big or small. For oneself or for others, this is all about creating value.

4.3. Curriculum implementation: action-oriented teaching

As mentioned earlier, constructivism emphasizes "experience-based", "development" and "individual experience". This is the key to cultivating students' "value creativity". Therefore, "learning by doing" is to cultivate "value creativity" "" effective way, and the action-based pedagogy (action-based pedagogy) has become the best method for the implementation of "specialty-innovation integration" courses.

In practice, project-based learning, inquiry-based learning, problem-based learning or service learning are all Action-based pedagogy, which can be used and should be flexibly integrated into the process of "specialization integration". Moreover, project-based learning is based on the most real problems, and there are "real outputs" that can solve the corresponding problems, which can be reports, models, videos, etc., as long as it can effectively show how to solve the corresponding problems. Therefore, project-based learning is currently the most effective and appropriate action teaching method, which can also explain the high proportion of project-based learning in innovation and entrepreneurship education.

5. THE CONCLUSION

In short, in the context of the digital economy, the curriculum model of "integration of specialization and innovation" is an effective way to improve the "double innovation" ability of higher vocational talents. To a certain extent, it can avoid the homogeneity of the current "double innovation" education. It is of great significance for the realization of high-level vocational schools and professional construction with Chinese characteristics.

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