

Research on Connotation of Core Competence of Higher Vocational Students

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Abstract: The connotation of core competence of vocational college students has its own unique characteristics. This paper draws useful elements from the research framework of students' core competence at home and abroad, analyzes deeply the characteristics of higher vocational students themselves and investigates the needs of enterprises' talents in detail and judges the trend of social future talents demand. On this basis, puts forward the basic framework of Higher Vocational students' core competence.

1. Introduction

According to *the opinions of the Ministry of education on comprehensively deepening the curriculum reform and implementing the fundamental task of cultivating talents by virtue*, "The Ministry of education will organize research and put forward the core literacy system for the development of students in each school segment, and make clear the necessary character and key ability that students should have to meet the needs of life-long development and social development, highlight personal cultivation, social care, family and country feelings, and pay more attention to independent development, cooperation and participation, and innovative practice."^[1] In 2012, UNESCO released the EFA global monitoring report, which proposed three main skills for all young people. The first is basic skills, the second is transferable skills, and the third is technical and vocational abilities. Before that, countries and international organizations have conducted extensive and in-depth research on core literacy from different perspectives, and put forward their own framework of core literacy. For example, in 2002, the United States officially launched the 21st century core skills research project, which focuses on the skills that can make students succeed in the 21st century; In 2005, the European Union officially released *Key Competences for Lifelong Learning: A European Reference Framework* that describes the core literacy framework of lifelong learning from three dimensions of knowledge, skills and attitudes. In 2001, the Ministry of education of the Russian Federation issued the strategy for the modernization of general education content, which is characterized by the integration of daily life and cultural leisure into the core literacy development field. In September 2016, the overall framework of the core literacy of Chinese students' development was released. This achievement elaborates the six core literacy that Chinese students should have, namely, Humanistic Heritage, scientific spirit, learning, healthy life, responsibility and practical innovation, from three dimensions of cultural foundation, independent development and social participation. But for the students of higher vocational colleges, in the face of the talent requirements of the new era and the future social changes, it has become an urgent task to explore the core quality that can promote the students' lifelong career development in line with the characteristics of higher vocational students, to meet the needs of the times and the professional needs.

2. The Reference of the Report on the Development of Core Literacy of Chinese Students

According to the situation since the release of the report on the development of core literacy of Chinese students, the Ministry of education has not issued it in the form of official documents, because no relevant documents can be found on the relevant websites of the Ministry of education. From the title to the content of the report, there are still a lot to learn from. One is that the topic of the report has included vocational students. From the title of the report, the core literacy research

results of the report should be suitable for middle school students, vocational students, undergraduates, postgraduates and doctoral students, because these are within the meaning of Chinese students. Second, the content of core literacy covers a wide range. From the content of the report, the three dimensions of core literacy, six core literacy and eighteen basic elements cover a wide range, fully reflecting the essential character and key ability to adapt to the needs of life-long development and social development of Chinese students. Third, the core quality of the report is reflected in the different stages of students' own core system. Although from the perspective of the main unit that publishes the results, the results report of the core literacy is more inclined to the middle school students of basic education, but a careful study of the basic content of the core literacy shows that the content of the results report of the core literacy can be suitable for students at all stages. Taking the core literacy as the basic framework, we can build the core literacy of students in different stages.

3. Research on the Core Quality of Higher Vocational Students

With the publication of the report on the development of core literacy of Chinese students, core literacy has become a hot word discussed by experts and scholars. It can be said that the research on core literacy is a further inquiry on what kind of people to cultivate after the research on quality, and it is also a further answer to the problems faced by the current education and the requirements of the times. In the past 20 years, China's higher vocational education has been exploring and studying the objectives and quality requirements that higher vocational college students should achieve. The educational goal of higher vocational education has gone through several stages, such as the training of new workers with all-round development of morality, intelligence and physique, the training of high-quality workers and all kinds of practical technical talents in the first line of production and service, the training of high-quality workers and high skilled professionals and high-quality workers and technical talents, The continuous changes of the training objectives of higher vocational college students from new type of laborers, all kinds of practical technical talents, high skilled professionals to technical technical talents are the true portrayal of the continuous improvement of China's economic and social development, and also fully reflect that vocational education is the most direct and close department in the education industry and economic and social development , and also fully It shows that the training goal of vocational education is gradually enriched and improved with the needs of economic and social development and people's understanding of vocational education. From the perspective of the development and change of the training objectives of higher vocational students, the training objectives of higher vocational students are all around the core theme of quality education to explore and practice, however, the development of quality education to today, no matter from the theoretical or practical aspects, there are some puzzles or problems.

Domestic experts and scholars on the theoretical research of core literacy are also the first to make further answers from the theoretical level to the problems and puzzles existing in quality education, although these achievements have not achieved the practical effect that can be taught, learned and evaluated in practice. From the current situation of education development at home and abroad, school education needs to pay more attention to the basic literacy that students can adapt to the future social life and personal life-long development. These literacy will not fluctuate greatly due to the economic and social development, but will become the ballast for students to cope with the future economic and social development and change.

From the perspective of the research status of scholars, the research on core literacy of vocational college students has attracted the attention of many scholars, and the scope of research is very wide, and has achieved preliminary results in some aspects. But looking at the existing research content and results, it is not enough to determine the core quality content system of higher vocational students. From the school's point of view, higher vocational colleges are different from primary and secondary schools, different from undergraduate colleges.

Therefore, the core literacy of higher vocational students can not be simply transplanted from the content of the report on core literacy of Chinese students. At the same time, there are great

differences in school running characteristics, discipline characteristics, specialty setting, training direction and other aspects between higher vocational colleges. Higher vocational colleges have their own industry characteristics, and different schools have different requirements for students' future professional quality. It can be seen that it is difficult to determine the content of the core literacy which is suitable for all kinds of students in different vocational colleges. It is necessary to establish the core literacy which is suitable for students in different vocational colleges according to the training objectives of different vocational colleges. From the perspective of students, not only are there great differences among students in different aspects, but also within the same school, such as students' knowledge background, behavior quality and personality characteristics. As far as the individual students of higher vocational education are concerned, the core literacy should fully reflect the concept of student-centered, and reflect the students' individual strengths and characteristics. Therefore, if we start from the reality of higher vocational students, we should help students to establish their own development of core literacy. From the above two aspects of analysis, there is still a long way to go in the research on the core literacy of vocational college students, which needs to be studied comprehensively.

4. The Explore on the Core Quality of Higher Vocational Students

The research on the core quality of higher vocational students should be based on the students, study the characteristics of higher vocational students, and pay attention to the development of students themselves; pay attention to the needs of enterprises, and analyze the demand positioning of enterprises for higher vocational talents; fully reflect the school running objectives based on the industry characteristics of the school; pay attention to the social development trends, and conform to the development characteristics of the new era.

For higher vocational students, there are many inherent deficiencies, but there are also many late development advantages. These characteristics determine the complexity and uniqueness of the core quality of higher vocational students. Taking the 2017 summer college entrance examination of Shandong Province as an example, in 2017, 482554 people were enrolled in the summer college entrance examination, 265863 for undergraduate courses and 216691 for junior colleges. From the perspective of enrollment, vocational students account for a considerable proportion. From the perspective of admission scores, the undergraduate qualification line defined by science in college entrance examination is 483 for liberal arts and 433 for science, and 170 for liberal arts and Science in higher vocational education. From the perspective of admitted students, vocational students are basically 50% of the students after the summer college entrance examination. Behind the differences of admission scores are not only the differences of students' basic culture and knowledge structure, but also the differences of some non intelligence factors, such as the differences of students' ideals and beliefs, willpower and self-control. From the perspective of the student level of higher vocational colleges, the student level of higher vocational colleges includes: summer college entrance examination, spring college entrance examination, three or two consecutive studies, three plus five-year consistent system and self enrollment students. Therefore, from the perspective of students' enrollment level, there are also huge differences between students' intelligence factors and non intelligence factors behind the multi-level learning subject of higher vocational students, especially the double difference students of intelligence factors and non intelligence factors. All these differences have brought great challenges to the research of students' core literacy.

In view of these shortcomings, we should also seriously analyze the advantages of higher vocational students. From the tracking, research and analysis of higher vocational students in these years, they have shown good advantages in the following aspects. One is high Eq. Although the cultural foundation of vocational college students is weak, but these students are rich in emotion, willing to communicate, good at making friends, rich in collective sense of honor and social sympathy, willing to actively participate in social volunteer service; second, the students have obvious personality. The self-discipline of vocational college students is not high, self-control is not strong, but each student has a strong personality, has a strong sense of self-consciousness and desire

to express. Third, the students have strong resistance to setbacks. In middle school, higher vocational students should not only face the multiple pressures from learning, parents, teachers and their own factors, but also face the spiritual pressure brought by repeated failures, especially the impact of external environment on their body and mind. Although through their own efforts did not enter the undergraduate colleges, but after entering higher vocational colleges, still full of hope for their future.

From the student's point of view, the cultivation of students' personal quality should focus on the strengths of students, but also to make up for the shortcomings of students. In the sample survey of nearly 100 students of different majors in our university, 62% of the students think that their advantages are to help others; 45% of the students think that their psychological quality is poor. These two data are the most outstanding data for students' own advantages and disadvantages. In the questionnaire survey of scholarship winners, 64.5% of the students think that good professional performance is the most important factor for them to obtain scholarships, and that they should first learn their major well in school; and 57% of the students think that the comprehensive quality is equally important, so they should focus on improving their communication ability. In the questionnaire survey of student cadres, 89% of the students think that hard work is the most important quality of student cadres; in the questionnaire survey of internship graduates, 87% of the students think that the school should strengthen the cultivation of communication and coordination ability. From the perspective of students' questionnaire survey, students reflect different core quality requirements from different perspectives.

In the questionnaire and interview of enterprises, enterprises also have their own quality requirements for higher vocational students. The author carried out a questionnaire survey on nearly 300 enterprises, and interviewed 20 enterprise bosses and personnel department managers, from which the information about the core literacy of vocational college students was sorted out. In the survey of what kind of core quality do you think higher vocational students should have? the professional quality, moral quality, psychological quality, executive ability, sense of responsibility and self-improvement has become the most important quality of higher vocational students for enterprises. There is a certain gap between this result and our idea that the professional quality should be the first factor in the employment of enterprises. With this question, we interviewed some business leaders. In the interview, they said frankly, the two-year professional study of higher vocational students will not be very profound, just the preliminary basic knowledge. If the enterprise needs a position with strong professional knowledge, the enterprise will recruit undergraduate, master or even doctoral students. Therefore, for higher vocational students, the professional quality is not very important to them. If necessary, we will carry out professional training, After training, we can fully meet the needs of the enterprise's post. From the survey results of graduates' employment positions, it also verifies the judgment of enterprises on professional quality. In the survey of graduates' employment major, only 37% of them are major counterparts, which shows that a large number of students are engaged in jobs unrelated to their major after graduation. From the perspective of the needs of enterprises for the quality of talents, enterprises have a clear position for higher vocational students, and the requirements for the non professional quality of higher vocational students are relatively high.

From the perspective of higher vocational colleges, each school has its own unique school running characteristics and industry characteristics, so students in different vocational colleges are printed with the brand of different school core literacy. In Shandong Province, more than ten Vocational Colleges in the school charter comparison found that each school according to their own school characteristics and school characteristics have set their own student training objectives. Among these objectives, some schools emphasize the cultivation of entrepreneurial talents, some emphasize the cultivation of technical talents, some emphasize the cultivation of innovative talents, some emphasize the cultivation of talents for productive enterprises, some emphasize the cultivation of talents for service-oriented enterprises. Obviously, these goals are to explain the core qualities that students should have from the perspective of the school.

From the perspective of social development in the future, this generation of students bears the

responsibility of realizing the basic modernization of the motherland and building a modern and powerful country. Therefore, we should focus on the social development trend in the next 20 years, and cultivate students' core literacy to adapt to the future social development. The report of the 19th National Congress of the Communist Party of China pointed out that we should promote the reform of the quality, efficiency and driving force of economic development, and constantly enhance China's economic innovation and competitiveness. At the same time, Chinese society is facing the transformation from the industrialized society to the network information society. In the future, talents must adapt to the needs of talents in the network information age. In the era of network information, the biggest threat to talents is artificial intelligence, which is gradually improving. Recently, the expression robot named "Sofia" was granted Saudi Arabian nationality, which aroused widespread concern. From the perspective of vocational education, the era of students and robots competing for jobs has come. From the current development situation, no matter the repetitive routine work of service-oriented, productive or technical posts, the trend of robot replacing student posts is inevitable. It can be inferred that the service-oriented, productive and technical talents trained by vocational colleges may face fierce competition in the future. Therefore, in the face of the development and changes of the future society, especially the coming of the era of artificial intelligence, vocational colleges need to cultivate core literacy that can compete with robots. From the current data, artificial intelligence can only complete some basic work, and it will definitely be further developed and improved in the future. Frank levy and Richard Murnane, famous economists in the United States who have participated in the research of OECD core literacy framework, think that "the work mainly consists of conventional cognitive work and conventional manual work, and the share of such labor is declining, because such tasks are most easily done by programming computers. The country's growing share of the workforce is for jobs that emphasize expert thinking or complex interactions that computers cannot do."^[2] Therefore, from the perspective of social development, the jobs of vocational college students will be constantly updated and changed. We should not only focus on cultivating the core literacy of vocational college students to adapt to the information age, but also cultivate the core literacy that can be transferred in the future. "When the repetitive routine work is replaced by computers, human beings must be engaged in complex work that computers can't do and be competent for. Therefore, we must develop the complex ability that computers don't have, that is, the 21st century literacy with expert thinking and complex communication ability as the core."^[3] From this point of view, higher vocational colleges should pay more attention to the cultivation of innovation consciousness, innovation ability and innovation thinking of higher vocational students; pay more attention to the cultivation of communication ability, coordination ability and team cooperation ability of higher vocational students; pay more attention to the cultivation of reflection ability and problem-solving ability of higher vocational students, and pay more attention to the cultivation of students' sense of social responsibility and social practice ability. These qualities cannot be surpassed in a short period of time by artificial intelligence, and they are also the key qualities for higher vocational students to adapt to the future social development.

Based on the analysis of the above factors, combined with the content of the report on the development of core literacy of Chinese students and the research results related to core literacy abroad, the content structure of core literacy of higher vocational students can be determined as the following content, namely, the interaction ability between students and themselves, between students and occupation, and between students and society. Each interaction ability is composed of three basic indicators, and each indicator is composed of three basic elements. The overall framework is as follows:

The content framework of core quality of Higher Vocational Students			
Core quality of Higher Vocational Students	The interaction ability between students and themselves	Know yourself	Physical and mental health
			Self management
			Self reflection
		Cultivate yourself	learning ability
			Communication and expression ability

		develop yourself	humanistic spirit
			Rational thinking
			Internet thinking
			Data thinking
	The interactive ability of students and occupation	Occupational Technology	Technology application capability
			Professional skills
			Technical expertise
		vocational ability	innovation ability
			Ability to question
			Research capability
		Professionalism	Craftsman spirit
			The spirit of suffering
			Team spirit
	The interactive ability of students and society	Social integration	Ideal and responsibility
			Respect and tolerance
			Honesty and friendliness
		social participation	National identity
			International Understanding
			social responsibility
		Social survival	Win win cooperation
			Harmonious symbiosis
			coexistence with respect

The content of core literacy of higher vocational students will continue to evolve with the development of the times, the needs of enterprises for talents and the progress of society. However, no matter how the evolution, the pattern of interaction ability between higher vocational students and themselves, enterprises and society will not change, only the further deepening of one of the core literacy will change.

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