# An Empirical Study on the Quality of Integrated Vocational Education in Middle and Higher Vocational Colleges

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# Abstract

In 2020, it will be clear at the national level that "the proportion of the general public in employment will be roughly equal, and the scale of secondary vocational school enrollment will be appropriately expanded." At the same time, it puts forward the requirements of "providing more opportunities for high-level vocational education and achieving the integration of all levels and types of vocational education", and makes it clear that "secondary vocational schools should take the initiative to do well with higher vocational colleges' 3+2 ". Since 2019, middle and higher vocational education has received unprecedented attention. This paper adopts questionnaire survey, interview and other research methods to make an empirical study on the quality of integrated vocational education in wenzhou, investigate the existing problems and propose countermeasures.

# Keywords

Integration of middle and higher vocational colleges; Vocational education; Quality of connection; The empirical research.

# **1.** Introduction

In 2019, the education department of zhejiang province hereby stipulates that from 2019, the original "3 + 2" vocational education training mode will be changed to the integrated five-year training mode of middle and higher vocational education. Under the original "3+2" mode, the involvement degree of higher vocational colleges in the first three years of talent training is limited, and the new mode will contribute to the mastery of the training of middle and higher vocational talents. According to statistics, the proportion of colleges connected with higher vocational colleges in the national pilot is nearly 30%, but the proportion of students in the whole higher vocational colleges is only about 5%. Therefore, the integrated vocational education of middle and higher vocational colleges is still in its initial stage on the whole, with a low overall level of connecting quality and a lack of quality evaluation index system. Therefore, the quality level of integrated talent training needs to be further improved.

# 2. Policy trend analysis of integrated vocational education in middle and higher vocational colleges

#### 2.1 Review of relevant policies before 2019

In 2002, the decision of the state council on vigorously promoting the reform and development of vocational education proposed that "the five-year higher vocational education after junior middle school should be moderately developed, and the proportion of graduates from secondary vocational schools should be expanded to enter institutions of higher learning, especially higher vocational schools, for further study. In 2010, the outline of the national program for medium - and long-term education reform and development (2010-2020) clearly proposed the establishment of a "modern vocational education system with the coordinated development of secondary and higher vocational education". In 2014, the decision of the state council on accelerating the development of modern vocational education pointed out that "secondary and higher vocational education should be closely linked. We will promote the integration of professional programs and the content of professional education in terms of training objectives, professional programs and teaching processes, so as to form

a closely linked, distinctive and dynamically adjusted curriculum system for vocational education. For at the national level will further advance of higher vocational professional cohesion, the national specialized introduced the Ministry of Education on promoting the coordinated development of secondary and higher vocational education guidance "and" the Ministry of Education about promote the innovation in higher vocational education reform lead several opinions of the development of vocational education science two "in higher vocational professional cohesion" project file. It has become an urgent demand of the vocational education policy to link up the higher and middle vocational specialties, which indicates its position in the superstructure and strengthens the importance of its design in the level of national will.

#### 2.2 Interpretation of relevant policies after 2019

In 2019, the national vocational education reform plan "(hereinafter referred to as the" vocational education article 20 ") is put forward in "must in some important areas of higher vocational well versed in training of junior middle school graduate enrollment scale, establish the secondary vocational schools and ordinary high school admissions platform, actively recruit high school graduation not bound students, veterans and retired athletes, laid-off workers, migrant accept secondary vocational education". This reform from the national level to enrich the higher vocational students. The "article 20 on vocational education" also proposes to "continuously update and promote the implementation of the professional catalogue, professional teaching standards, curriculum standards, on-the-job practice standards and practical training conditions in vocational colleges and universities". In principle, the catalog of vocational colleges should be revised every five years, majors should be adjusted every year, and teaching materials should be revised every three years. At the same time, the plan also emphasizes the increase of practical teaching hours, which in principle account for more than half of the total teaching hours, and the internship time is generally 6 months. The "20 rules of vocational education" requires teachers in vocational colleges to have no less than one month of enterprise practice time every year. This reform has effectively solved the embarrassing situation that teachers in middle and higher vocational colleges lack enterprise practice experience and lag behind in mastering cutting-edge professional technologies, and provided a favorable way to promote teachers in middle and higher vocational colleges.

About deepening in zhejiang province in 2019, the department of education in the guidance of the five-year vocational education integration work specified in the five-year vocational education higher vocational integration, led by higher vocational colleges to organize the implementation, optimizing level secondary vocational schools, at or above the provincial level key technical school or grade school in the name of the professional (brand, advantageous) and model (backbone, characteristic, emerging) professional. We will emphasize improving the mechanism for interaction and cooperation between high and middle vocational schools and enterprises. Led by higher vocational colleges, we will work with relevant secondary vocational schools to determine majors, formulate talent training programs, and implement specific work. Schools should take the initiative to unite with industries and enterprises, actively win support from local government departments concerned, deepen the integration of industry and education, school-enterprise cooperation, give full play to the role of professional vocational education groups, and establish a long-term cooperation mechanism.

# **3.** Investigation on the quality of integrated vocational education in middle and higher vocational colleges

In order to understand the current situation of the quality of connection between vocational colleges and their cooperative secondary vocational schools in wenzhou, a survey was carried out in view of the professional matching degree of middle vocational colleges, the connection degree of curriculum contents and teaching methods, the coordination of teaching management of middle vocational colleges, and the students' adaptability to higher vocational colleges. By setting questions online and issuing questionnaires, 447 students who had transferred from secondary vocational schools to higher vocational colleges (" 3+2 ") were sent questionnaires. 447 questionnaires were collected and 447

valid questionnaires were collected with a recovery rate of 100%. Questionnaires were distributed to 108 full-time teachers in secondary vocational schools, 108 of which were valid, with a recovery rate of 100%. Questionnaires were distributed to 376 secondary vocational school students, 376 of which were valid, with a recovery rate of 100%. The investigated objects include all higher vocational colleges and secondary vocational schools in wenzhou that implement the integrated vocational education.

#### **3.1 Setting of research framework**

Through investigation and research to understand the present situation in wenzhou area secondary vocational and higher, the understanding of higher vocational specialty setting, curriculum system, the higher quality of personnel training, higher education management system in the aspects of circumstances, in order to promote the integration of vocational education quality of pulse diagnosis, to construct the integration of vocational education quality evaluation index system to provide effective data support. The questionnaire is divided into three types, which are "3+2" students in higher vocational colleges, students in secondary vocational schools and full-time teachers in secondary vocational schools. There are 80 questions of single choice and 10 questions of multiple choice in each questionnaire, which mainly start from the content of curriculum, cohesion, practical teaching and student development.

#### **3.2 Research results**

#### 3.2.1 Questionnaire survey results of "3+2" students in higher vocational colleges

The gender ratio of "3+2" students in higher vocational colleges was similar, among which 58.17% were male students and 41.83% were female students. 64.64 percent of the students said that they chose to participate in the integrated vocational education of middle and higher vocational colleges out of their own will, and 65.1 percent said they chose this mode of education because their families arranged it or they failed in exams. In the design of the quality of the connection between high and secondary vocational schools, the researchers focused on the design of the secondary vocational internship effect and the impact of higher vocational education, which is also the secondary vocational schools generally reported to be difficult to connect the disaster areas. Because in the general case, the transition period of the transition assessment in the fifth semester, and students should be in the sixth semester after the completion of the internship to end the secondary vocational stage of learning, and then began to enter the higher vocational stage of learning. In the meeting of communication between high and middle vocational colleges held for many times, the administrators of secondary vocational schools have said that this group of students in the sixth semester is difficult to manage, almost in the state of "free range". Although this group of students will take place in the enterprise field work, but because of the lack of practice goals, effective management, the effect of field work, and even form bad habits, knowledge structure is broken, the original technical ability is weakened, the result is that after entering higher vocational colleges become teachers and peers in the eyes of "difference", a lot of "3 +2" higher vocational teacher said students are hard to tube, learning foundation is poor, poor study habits, the same courses taught by the same final comprehensive scores, corporation students scored an average of the highest class, students scored an average of second class examination alone, "3 +2" students scored an average of the lowest class and do not pass the highest. In the list of students whose academic status is predicted in each semester in the higher vocational college where the researcher is located, the proportion of "3+2" students is more than 60%, higher than that of other types of students. As a result, the researchers think that explore solve students at secondary stage caused by low quality of field work management in higher vocational stage has a lot to the necessity of the problem of poor performance, after all, the secondary vocational education in the new period to get a breakthrough development, must realize the effective connection with the higher vocational education, to broaden the admissions - culture - the path of success.

# **3.2.2** Questionnaire survey results for secondary vocational school students

In order to fully understand the situation of students participating in the internship in the secondary vocational school, the researcher prepared a questionnaire for the third grade students of secondary

vocational school to participate in the internship, with a total of 15 questions. The question "please score and evaluate your actual situation in the internship" was further designed with 15 questions. Only 52.66 percent of the students said that school instructors could go to enterprises for guidance two or three times a week. Only 56.65% of the students reported that during the internship, the company provided them with special training in work skills and professional qualities. Only 53.19 percent of the students reported that the company assessed them at regular intervals. Only 49.73 percent of the students said they connected what they learned with their actual work during the internship. In a questionnaire survey of 376 secondary vocational students, 55.32% of students to participate in field work time less than 6 months, 70.48% of students said they participate in field work has a certain pressure, there are 84.84% of the students expressed a willingness to participate in practice activities organized by cooperation in higher vocational colleges, only 52.13% of the students said it had taken part in exchange activities organized by the cooperation of vocational colleges.

#### 3.2.3 Questionnaire survey results for full-time teachers in secondary vocational schools

In the questionnaire of the secondary and high school title succession full-time teachers, the researchers designed a total of 12 single choice and multiple choice. 56.48% of the secondary vocational teachers expressed in its integration of vocational education knowledge, 62.96% of the secondary vocational teachers of higher professional knowledge in general, more than 50% of the secondary vocational teachers did not take part in the higher exchange activities, 86.11% of the secondary vocational teachers think can cooperate with cohesion of higher vocational colleges, let the students in higher vocational colleges campus off-campus practice base for training practice. About higher quality in terms of what needs to be in "improvement", 58.33% secondary vocational teachers think course bridging to improve quality, 53.7% secondary vocational teachers think that the project of talent fostering cohesion quality to be improved, 50% secondary vocational teachers to think turn examination way needs to be improved.

# 4. Problems reflected

#### 4.1 There is no matching between the secondary and higher vocational college

The primary problem of continuing to promote the integration of vocational education in middle and higher vocational colleges is the mismatch of the professional directory in middle and higher vocational colleges. In general, middle and higher vocational colleges are connected with similar majors. However, in practice, due to the serious non-correspondence in the professional directory of middle and higher vocational colleges, the phenomenon of "cross-specialty" in the process of connection is common, and even there is a large span of irrational operation. For example, some high and middle vocational joint project marketing professional directory of middle and higher vocational colleges, there is that the professional directory of middle and higher vocational colleges, there is no communication between the two categories of professional catalogs when planning the professional Settings, so that different professional catalogs are formed. Under different professional directory system, a large number of secondary vocational education stages are not set in the professional higher vocational education stage, and vice versa. Therefore, in order to maintain high and middle vocational schools to connect the project, we can only look for similar majors to connect.

### 4.2 The curriculum setting of middle and higher vocational colleges is unreasonable

There are some problems in the curriculum setting of middle and higher vocational colleges, such as the overlapping content, the improper arrangement of the following courses and the over-span of the curriculum objectives. When the researcher interviewed the full-time teachers of the "3+2" class in higher vocational colleges, he learned that there were 4 to 5 specialized courses with the same names and similar teaching materials. The teachers were unwilling to teach and learn, which caused

unnecessary repetition for students. So some teachers do not follow the textbook in class and try to teach students new knowledge. According to the survey, the students who think only a few contents are repeated account for 20%, the students who think there is repetition, but it is not serious or the content is deeper in higher vocational colleges account for half, and the students who think the content is repeated more account for 24%. The researchers also investigated the difficulty of "3+2" students in higher vocational colleges. According to the survey data, 14 percent of the students think the curriculum is difficult and difficult to learn. Forty percent of the students said their higher vocational study was difficult overall, but they were able to keep up with it through hard work. Another 27 percent said the content of higher vocational courses is easy to learn. Only 17% of the students think that the curriculum is more balanced on the whole, that is to say, the setting is more reasonable. The overall setting of course difficulty should be normally distributed. Simple or too difficult will make students less interested in learning.

#### 4.3 The management system of middle and higher vocational colleges is not coordinated

In general, secondary vocational schools and higher vocational colleges are under the jurisdiction of local governments. Therefore, it is necessary to clarify the relationship between the vocational education department and the higher education department at the provincial level, so as to change the previous practice of "managing the secondary vocational schools by the vocational education department and managing the higher vocational colleges by the higher education department. Vocational education in national new stage of positioning and its important role, vocational education should be independent to complete modern vocational education system management duties, to unified management in higher vocational colleges to deal comprehensively with the bridging programs in vocational, change the administrative level of artificial segmentation problem, thus making vocational education management system in the education system. Second, a stable and longterm communication and consultation mechanism should be formed at the college level to strengthen the equal dialogue and exchange between secondary vocational schools and higher vocational colleges. Because of higher in the past practice, higher vocational colleges as the cohesion of the upper school, with the cohesion of the secondary vocational school teachers in curriculum, training process, arrangement and so on have very strong guidance and regulation effect, causing lower secondary vocational schools in the various problems encountered in the teaching work, but because of the lack of communication can't get timely solve. In view of this, it is necessary for middle and higher vocational colleges to reach a basic consensus when carrying out connecting projects. The two are not a relationship between superior and subordinate, but a cooperative partnership of talent training.

# 5. Reforming the assessment method for the transfer of integrated vocational education in middle and higher vocational colleges

According to the notice of zhejiang provincial department of education, zhejiang development and reform commission on the issuance of the 2019 integrated five-year vocational education enrollment plan for secondary and higher vocational colleges in zhejiang province, higher vocational colleges in the province must study how to ensure the quality of students in the new situation of expanding the size of secondary vocational transfer students. At present, the majority of higher vocational colleges in the province are through a variety of forms of transfer assessment selection link professional secondary vocational students into the higher vocational stage of learning. But through the selection into the higher professional students, the quality is not ideal, though higher vocational colleges has put in turn period of assessment of human and material resources, its basic reason lies in the cultivation of the secondary phase process and the cohesion of higher vocational professional disconnect, examination content is not suitable for secondary vocational students' existing knowledge structure and ability level. Therefore, it is necessary to improve the selection effect by reforming the integrated five-year vocational education specialty and student selection method. In addition to the selection of students, may be added to connect the professional examination. According to the examination result, adjust the ratio of turning section dynamically. By building in the higher

professional technical secondary school evaluation index system, to join the students quality, professional technical secondary school recruitment of students professional plan completion, talent training quality, professional exchanges in vocational evaluation, is not only in order to ensure the quality of transfer period of students, and to crack in its integration of vocational education "two stages" problem.

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