### Research on the Mechanism and Path of Integrated Education from the Perspective of Type Education for Higher Vocational Colleges and Undergraduate Programs

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Abstract: It is of great significance to construct a modern vocational education system and train highly skilled personnel to combine the training mode of higher vocational college and undergraduate. However, in the process of implementation, it faces some problems such as improper connection of curriculum system, shortage of teaching resources and mismatch of talent training objectives. From the perspective of type education, this paper deeply analyzes the connotation of type education, discusses the importance of connecting vocational college and undergraduate training mechanism, explores the construction of connecting training mechanism and realization path, to improve the connection between education levels, provide students with more flexible and targeted learning channels, and cultivate more compound talents with high technical level and high comprehensive accomplishment. This can promote the high quality development of vocational education.

Keywords: Type education; Higher vocational college; Undergraduate; Through cultivation; Path analysis

Online publication: April 2, 2025

#### **1. Introduction**

By reasonably extending the school system to enhance cohesion between different educational levels, we can integrate the training methods of vocational colleges and undergraduate programs. This will offer students a more flexible and targeted learning pathway. The goal is to cultivate more versatile talents with high technical skills and comprehensive accomplishments for society through modern vocational education. The system needs to deeply integrate this new teaching and training mechanism. In addition, the through-training mechanism can integrate the characteristics of higher vocational education and undergraduate education into teaching, including the characteristics of vocational education, long school system and connection after through-learning, which can provide students with a higher learning experience, and help teachers break the existing educational structure and

constantly improve their teaching level. This can provide a more excellent teaching experience for the education and teaching level of vocational and undergraduate education.

#### 2. The connotation of type education

As an educational concept and practical teaching mode, type education pays more attention to the integration of the diversity and characteristics of the education system into the teaching process. Generally speaking, it is based on the different needs of the society for talents, and through the division of education forms into different types, targeted training suitable for various fields and more distinctive professional talents <sup>[1]</sup>. At the same time, from the perspective of type education, the behavior of education is no longer just to transfer various skills and knowledge and subject theories to students, but has different educational manifestations in the aspects of students' personal comprehensive quality, innovation ability training, personality development and vocational skill level shaping. In addition, in the education system, higher vocational college education and undergraduate education themselves are the two main modules of the education system. Each type of education undertakes different educational missions, and their training goals are also different<sup>[2]</sup>. Vocational college education pays more attention to the cultivation of students' vocational skills. In the teaching process, it will involve more practical ability and professional knowledge imparting and explaining. Its teaching purpose is to cultivate more skilled talents with higher professional skills and professional quality for the society. On the other hand, undergraduate education pays more attention to students' mastery of theoretical knowledge. This form of education pays more attention to improving students' comprehensive quality. Its teaching purpose is to cultivate compound talents with a profound theoretical foundation and high innovation ability. The connotation of type education is also reflected in the ability to optimize the allocation of resources involved in the two types of education, and at the same time, it can innovate the educational methods of both sides. He should effectively link up various forms of education within the education system, and give full play to the advantages and educational functions of various educational resources, to continuously promote the efficient integration of educational resources <sup>[3]</sup>. In addition, type education also encourages the diversification and innovation of educational methods to adapt to different students' learning needs and personality development.

# **3.** The importance of connecting the training mechanism between vocational college and undergraduate college

#### 3.1. To meet the needs of society for talents

In the previous education model, vocational college education and undergraduate education have always been two independent teaching systems, which is easy to lead to vocational college students after completing their own arranged studies, if they want to further improve their academic qualifications and knowledge level, they need to spend more time and energy to transfer to other schools. In addition, after the successful transfer, they also need to face the problem of connection between courses, which makes the learning problems faced by students in higher vocational college more difficult to adjust <sup>[4]</sup>. However, if the through training mechanism is implemented, the traditional separate teaching mechanism will be easily broken. It will provide special channels for students after completing the vocational college study, so that they can seamlessly enter the stage of undergraduate education, to achieve their further study and improve the corresponding skills <sup>[5]</sup>. In addition, this mechanism can also train more comprehensive talents with solid professional knowledge and skills, as well as high-quality.

These talents can not only complete their own learning goals, but also play an excellent performance in their professional fields. At the same time, they can support themselves to carry out interdisciplinary and cross-field innovation work, to lay a solid foundation for social and economic development and industrial transformation and upgrading.

#### **3.2.** To promote the optimal allocation of educational resources

At the current stage, the integration of the teaching form and content of vocational education and general education has become an important way to promote the modernization of the education system and improve the overall quality of education. Therefore, the mechanism of integrating vocational college and undergraduate training is also in line with the practice and innovation direction of this development trend. Moreover, it can also promote the sharing of educational resources and further optimize the allocation. Through the adoption of the through-training mechanism, higher vocational and undergraduate schools can share their excellent educational resources when developing courses, to avoid the reuse or uneven distribution of educational resources <sup>[6]</sup>. At the same time, this integration can also provide students with more diversified learning options and expand their development space in the future. Students can learn the corresponding professional skills and basic knowledge according to the professional direction they are interested in and the actual career planning arrangement. In the undergraduate study, they can further deepen the theoretical knowledge they have learned and constantly improve their comprehensive mastery of the major to continuously achieve the overall improvement of personal ability <sup>[7]</sup>.

#### 3.3. To promote the integration of the two educational directions

On the one hand, the through training mechanism of vocational college and undergraduate can promote the integration of curriculum and teaching content. In the specific construction process, higher vocational colleges and undergraduate schools can jointly develop the same professional curriculum content, and in the adaptive stage, they can jointly create training bases and libraries and other platforms that can provide students with teaching resources, which can effectively avoid the repeated construction of teaching functional platforms and resources [8]. This kind of sharing of the whole teaching process content can not only give full play to the efficiency of using resources, but also further improve the learning experience of students, so that they can have access to the relevant professional knowledge outside their own courses and professional skills related to the development of the industry. On the other hand, this kind of through-training mechanism can also help colleges optimize the corresponding teaching staff structure. By combining vocational colleges with undergraduate schools, teachers of various disciplines can also realize cross-school exchanges and cooperation, and share their excellent experience and teaching methods summed up in the process of education, so that they can learn from other strengths and constantly optimize their teaching level <sup>[9]</sup>. In this way, not only can the final quality of students' learning be improved, but also can provide innovative conditions for teachers' career development and teaching methods. Finally, in terms of educational equity, the through-training mechanism can also effectively play its due function. By optimizing the allocation of relevant educational resources of undergraduate colleges to vocational colleges, more students can be provided with higher quality educational resources, and vocational colleges can also share their excellent practical teaching skills with undergraduate colleges, thus reducing the education gap caused by the unbalanced distribution of educational resources. This approach not only provides better conditions for the future career development of students and the improvement of personal comprehensive quality, but also provides a strong guarantee for the harmonious development of social education environment.

## 4. From the perspective of type education, vocational college and undergraduate through the training mechanism and path

#### 4.1. Unify educational objectives and teaching standards

Higher vocational colleges and undergraduate schools need to adjust their future educational goals and teaching standards according to the needs of economic and social development. At the same time, they also need to improve their educational and teaching goals and system construction based on the relevant characteristics of vocational education. In the past education process, the way of connecting vocational education was mainly carried out by the major learned in the curriculum, which led to the traditional education model is no longer suitable for the current teaching system, which will have a great impact on the connecting work between vocational colleges and undergraduate schools<sup>[10]</sup>. Therefore, the most important thing for vocational colleges to achieve a smooth connection with undergraduate colleges is to readjust the teaching objectives and professional standards of vocational education. At present, China's education system has updated the professional catalog including secondary vocational and higher vocational schools, and adjusted the teaching objectives at the same time. After the update, related majors also integrate more new technologies, and the speed of adapting to social development will become faster, which can also play a very good role in promoting the professional cohesion between the two stages. From the vertical level, the content of specialty setting needs to make progressive arrangements for the curriculum levels of each stage of vocational education. From the horizontal point of view, the specialty setting needs to be arranged in the direction of major categories to derivative majors, and it needs to be connected with job-oriented majors in the end. The structure of specialty catalog in vocational education in Conghua District is more in line with the overall teaching goal. In this way, an effective docking program between vocational education and undergraduate school education can be further planned <sup>[11]</sup>.

#### 4.2. Clarify the positioning of joint education

From the perspective of type education, the orientation of running a school needs to be made clear jointly by vocational colleges and undergraduate schools, and is also an important prerequisite for implementing the through-training mechanism. Only by making their education level and related teaching types clear, can we ensure the smooth promotion of the subsequent through-cultivation mechanism. This is not only the requirements for the direction of teaching, but also for the two aspects of talent training objectives, school philosophy, and school ideas need to be discussed in detail, to ensure the consistency of the direction in the real implementation process. To be specific, undergraduate schools occupy a very important position in the higher education system, and the orientation of these schools is basically to pay more attention to the training of senior applicationoriented talents <sup>[12]</sup>. This shows that undergraduate schools will not only help students lay a solid theoretical foundation, but also focus on the cultivation of students' practical skills and innovative ability. Therefore, in the process of integration, undergraduate schools need to make clear their uniqueness in talent training, such as training product design engineers, invention and creation engineers and other field engineers who need higher professional knowledge and higher innovation ability. Through this positioning method, undergraduate schools can ensure their talent training direction when carrying out teaching and education activities, and effectively form their unique teaching direction, to prepare for the follow-up implementation of the through training mechanism. The higher vocational colleges pay more attention to the cultivation of professional skills of higher operational functions or related professional involved in the technical talents <sup>[13]</sup>. Their training goal is not necessarily the direction of engineers, but in the orientation of colleges and universities, vocational colleges and undergraduate schools need to maintain consistency in the teaching direction. This consistency not only shows

that the two teaching systems will pay attention to the cultivation of practical ability, but also focus on improving students' ability to solve practical problems. It also shows that the integration between vocational colleges and undergraduate schools is also very high, and also reflects the scientificity of the through training mechanism, which creates conditions for the subsequent improvement of the educational level of both.

#### **4.3.** Strengthen the construction of teaching materials on both sides

In the process of promoting the through training mechanism in vocational colleges and undergraduate schools, it is necessary to fully take into account the training objectives of professional courses and related professional characteristics between vocational education and higher education. As an important carrier of education and teaching, the selection of relevant professional textbooks will affect the cohesion of the content of the two textbooks to some extent. Therefore, both vocational colleges and undergraduate colleges need to pay attention to the construction and adjustment of professional teaching materials, based on the original teaching content, constantly innovate the construction ideas of teaching materials, adhere to the learning experience of students, and improve the quality of professional teaching materials <sup>[14]</sup>. On the one hand, in the selection of available textbooks and management, schools in both aspects need to establish a strict review mechanism, starting with the whole process of textbook subscription, real use and evaluation of final use effect, to implement the standardized management of the whole process. In the selection of textbooks at the same level, priority should be given to state-level high-quality undergraduate textbooks, while full consideration should be given to the use of textbooks in cooperative colleges under the through training mechanism. When necessary, the two sides can communicate and finally determine the selected textbooks, to ensure the synchronization and consistency of the selection of textbooks<sup>[15]</sup>. On the other hand, in the process of cooperation between higher vocational colleges and undergraduate schools, corresponding teaching research and seminars can also be carried out. Invite teachers of various specialties together to discuss the needs of the job, to propose targeted solutions. At the same time, teachers from both sides can choose textbooks that integrate knowledge and skills, and pay attention to the characteristics of the textbooks that promote the integration of educational content. This will better provide students with vocational skills training and their future career development assistance.

#### 5. Conclusion

In general, from the perspective of type education, it is of great significance for the future development of talents and the construction of social economy to implement the integrated training mechanism between higher vocational colleges and undergraduate schools. Therefore, both schools need to reform their education systems, deeply study the new ways and methods that can promote the common development of education on both sides, and at the same time, they should consciously unify the direction of talent training on both sides and adopt various forms of adjustment, to help students improve their comprehensive quality and meet the social demand for applied talents when they enter the society.

### Funding

Shandong Province Vocational Education Teaching Reform Research Project (Project No.: 2023254); Shandong Province Education and Teaching Research Project, "Research on the Construction Strategy of the Integrated Curriculum System of High and Vocational Education in Pharmaceutical Production Technology Major" (Project No.: 2024JXY519)

#### **Disclosure statement**

The authors declare no conflict of interest.

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