

Analysis on the Training Mode of Connecting Talents between Secondary and Higher Vocational Schools Based on Curriculum Theory

—Taking Yunnan Open University as an Example for Integrated Open Talents Training Mode of Secondary and Higher Vocational Education

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Keywords: Vocational education system; Linkage between secondary and higher vocational education; Curriculum theory;

Abstract: In order to meet the requirements of the industrial process for technical skilled talents, it is necessary to build a vocational education system that effectively links up and penetrates different levels and types of vocational education and embodies the concept of lifelong education. The connection between secondary and higher vocational education is one of the ways to realize the vertical connection of different educational levels in vocational education system. This paper analyzes the open-ended talent training mode of higher vocational education in Yunnan Open University from the perspective of curriculum theory, and provides an example for the construction of the middle-high vocational education talent training model and vocational education system, and also provides an effective way for the lifelong education system.

1. Introduction

The development of China's industrial process requires the construction of vocational education system. Vocational education system includes vertical connection of different levels of education and horizontal connection of different types of education. The connection between middle and high vocational education is an important way to realize the vertical connection of education at different levels in the vocational education system. Its purpose is to promote the coordinated development of secondary and higher vocational education and cultivate high-quality technical skilled talents that meet the needs of economic and social development.

Yunnan Open University follows the basic laws of education and teaching, focusing on curriculum convergence, skills training as the basis, credit certification as a bridge. Based on the application of modern information technology, this paper constructs an open-ended talent training model for middle and high vocational integration. This paper analyzes it from the perspective of curriculum theory.

2. Course Theory and Integrative Open Talents Training Model of Secondary and Higher Vocational Education

The teaching content of the school is expressed in the form of teaching plan, syllabus, textbook or lecture notes. The "curriculum theory" is to study the role of these forms in the teaching process and to better play their role [1].

The training mode of connecting talents between secondary vocational education and higher vocational education refers to the talent training mode that organically links secondary vocational education and higher vocational education according to the requirements of Vocational education. At present, the mode of higher vocational education in vocational education in China is roughly summarized into three categories: consistent system connection mode, segmented enrollment connection mode and flexible structure connection mode [2].

Yunnan Open University utilizes the network teaching platform and high-quality network curriculum resources, realizes the organic connection between full-time secondary vocational

education and distance open specialized education through the integration of macro and micro, and explores the integrated open talent training mode of Yunnan Open University. This model macroscopically links the talent training programs and curriculum systems corresponding to the training objectives of the two types of education. This is the first link--the convergence of the curriculum system; the micro-level through the main courses or core courses and their teaching content. The integration of the knowledge system to achieve integration, this is the second convergence - the convergence of the knowledge system [3].

According to curriculum theory, the macro connection is realized through the connection of teaching plans of secondary and higher vocational schools, which is the connection of curriculum systems of secondary and higher vocational schools. The microscopic connection is realized through the syllabus of the curriculum (course standards) and the connection of textbooks, which is the connection of the knowledge system.

3. Model of Integrative and Open Talent Training Model in Secondary and Higher Vocational Education

3.1 Elements of Integrative and Open Talent Training Model in Secondary and Higher Vocational Education

According to the curriculum theory, the basic elements of the integrated open talent training mode of higher vocational education include the connection of curriculum system and knowledge system.

3.2 Connection of Curriculum System

By comparing and analyzing the curriculum system of secondary vocational education with that of higher vocational education, we can divide the courses of the integrated open talents training mode of secondary vocational education into three types: the first type is a special course for secondary vocational education majors; the second type is a special course for higher vocational education majors. The third category is the integrated link curriculum and practical teaching that are required for both secondary vocational education and higher vocational education, which are related to teaching content and can be integrated at the same time. [2] These three types of courses constitute a middle and high vocational school.

3.3 Cohesion of Knowledge System

The cohesion of knowledge system should be based on the different curriculum structure (spiral curriculum or linear curriculum), and the integrated curriculum knowledge system suitable for the cohesion of middle and high schools should be designed. For the design of linear curriculum, the essential content of higher vocational education is supplemented by "expansion" in the way of "foundation + multi-dimensional expansion". For the design of the spiral course, the "basic + spiral improvement" method is used to deepen the content of the secondary vocational education through "spiral promotion" to ensure the achievement of the requirements of higher vocational education level, and to carry out the teaching design [3]. The linkage of the knowledge system is specifically implemented on the elements of the curriculum, as shown in Figure 1. "Secondary" and "higher vocational" education are integrated into four elements through the four objectives of curriculum objectives, curriculum content, curriculum implementation and curriculum evaluation.

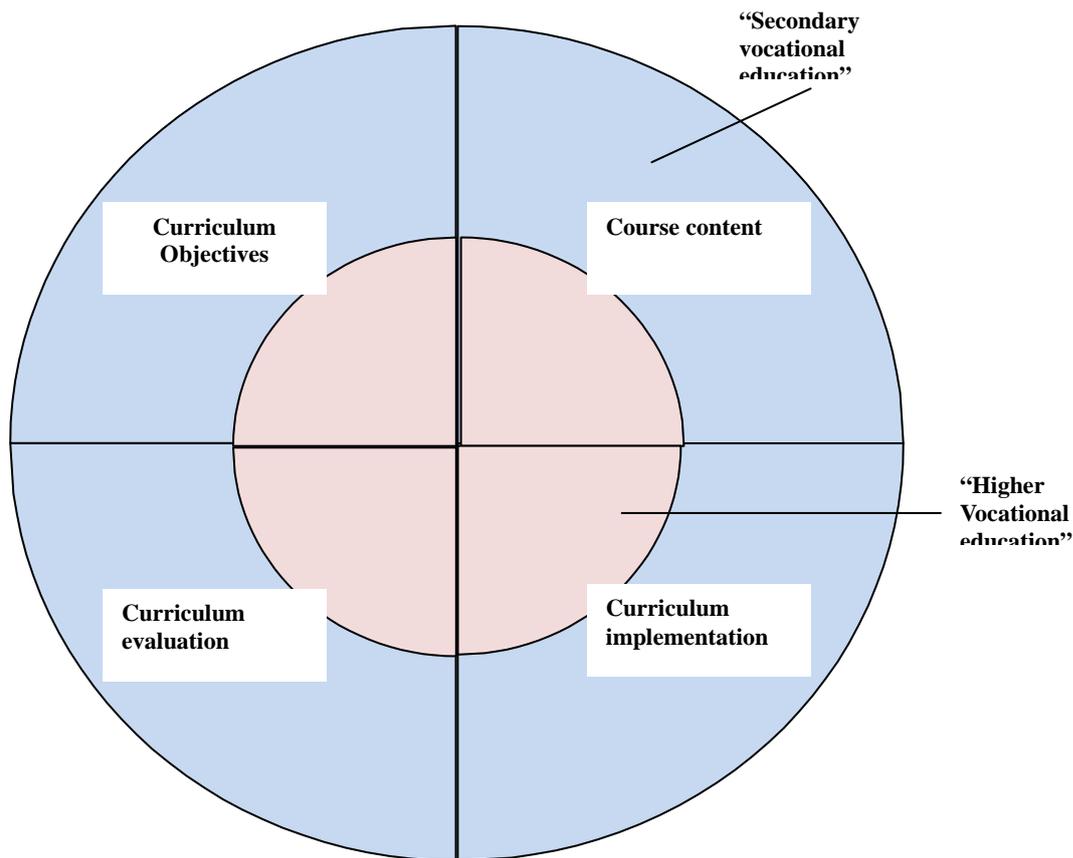


Figure 1 Curriculum Structure Map

3.4 Cohesion of Curriculum Objectives

Curriculum objectives refer to all kinds of teaching objectives that the curriculum needs to achieve, which is the concretization of talent training objectives. The cohesion of curriculum objectives refers to the integration of the objectives of secondary and higher vocational courses as a goal.

3.5 Cohesion of Course Content

Course content refers to the specific content and auxiliary resources used in the course of teaching. Its concrete manifestations are teaching plan, curriculum standards and textbooks, network curriculum resources, etc. The cohesion of curriculum content refers to the integration of curriculum content in secondary and higher vocational schools according to the requirements of curriculum objectives. By integrating the curriculum content into a curriculum content, the learning of this curriculum content can achieve both the requirements of curriculum objectives in secondary vocational schools and higher vocational schools. For example, the core course of printing media technology "printing principle and technology", the course is a linear course, adopting the "basic + multi-dimensional expansion" approach, integrating the "printing process" course of the secondary vocational school and the "printing principle and craft" course of higher vocational education. Teaching content, and formulating integrated curriculum standards, writing integrated teaching materials, and producing integrated curriculum resources. After completing the course, students will receive credits for the "Printing Process" course of the secondary vocational school and credits for the "Printing Principles and Techniques" course of higher vocational education. The course connection scheme is shown in Table 1.

Table 1 Connecting Scheme of Printing Principle and Technology Course Content

Content of courses	Teaching plan	Teaching material	Network Course Resources
Content of Higher Vocational Education	Principle of Printing Teaching	Module 1	10 knots x 20 minutes
Secondary vocational content	Four Printing Techniques and Digital Printing Technology: Flat, Convex, Concave and Hole	Module 2	20 knots x 20 minutes
	Printing Quality Detection and Control	Module 3	10 knots x 20 minutes

3.6 Linkage of curriculum implementation

Curriculum implementation refers to the process of putting the teaching plan into practice. The factors affecting curriculum implementation include teaching plan, teachers, teaching mode, social environment, etc. There are two main aspects to the convergence of the course implementation process:

One is the connection of teachers, breaking the limitation of space to form curriculum groups. Teachers in the curriculum groups communicate across schools and carry out curriculum teaching according to knowledge modules according to teachers' professional advantages, so as to realize the optimal arrangement of teachers.

The second is the connection of teaching modes. Yunnan Open University combines a variety of teaching media, teaching resources, learning methods, modern network education and traditional face-to-face education to explore the implementation methods and ways of hybrid teaching modes and promote the connection of teaching implementation.

3.7 Cohesion of curriculum evaluation

Curriculum evaluation refers to all kinds of evaluation of curriculum objectives, curriculum content, curriculum implementation and results. It is an important part of professional construction quality control system. The convergence of curriculum evaluation is based on ability. Several factors are considered: focus on the coordinated development of knowledge and vocational skills; fully consider the characteristics of online learning; combine process assessment with final assessment; pay attention to the unification of skills assessment standards and professional qualification standards.

4. Model of Integrative and Open Talent Training Model in Secondary and Higher Vocational Education

The integrated open talent training model of secondary and higher vocational education centers on curriculum convergence, takes skill training as the foundation, takes credit certification conversion as the bridge, and takes the application of information technology as the basic feature to construct a convergence model.

5. Characteristics of Integrated Open Talents Training Mode in Secondary and Higher Vocational Colleges

The construction of an integrated open talent training model for secondary and higher vocational education is based on curriculum theory. It takes high-quality technical skilled talents as the training objective and integrates the rules of full-time education and distance open education. It has the following characteristics:

5.1 Focusing on Curriculum Cohesion

Curriculum construction is the core of professional construction, so curriculum connection is the core of the integrated open talent training mode of higher vocational education. According to the

four-element theory of curriculum, curriculum convergence includes the convergence of curriculum objectives, curriculum content, curriculum implementation and curriculum evaluation. The basic mode of curriculum convergence is to integrate the four elements of the curriculum to achieve the optimization of the curriculum, reduce the repetition of the curriculum in the middle and high vocational courses, and improve the teaching efficiency.

5.2 Based on skill training

Open education has the attribute of vocational education and pays attention to the cultivation of vocational skills. Practical teaching plays an important role in the teaching process. The skill training of the integrated open talent training mode in secondary and higher vocational colleges is mainly reflected in four aspects:

One is to construct a curriculum system based on the working process to realize the connection between teaching content and working content.

The second is to complete the practical teaching task by constructing an integrated practical teaching system of "on-campus practical training+off-campus expanded practical training+network basic practical training+individual practical training of learning package": "on-campus practical training" carries out practical teaching of some courses and centralized practical teaching links based on the existing laboratory practical training room and base, the experiments and training bases of secondary colleges; Based on the off-campus training base, the "out-of-school development training" mainly carries out professional production internships and internships. Students choose local related companies according to their region, time conditions and direction of interest, and arrange individuals flexibly and flexibly. The practical training of "network basic training" is mainly to build a network virtual practice teaching supported by information technology under the mode of remote open education; the "learning package individual training" will be developed into a learning CD, including learning CD, teaching The "learning package", such as video and simulation training, provides learners with independent learning, simulation operations and exercises.

The third is to develop a computer simulation training system for professional core courses, so as to use the network to carry out some practical teaching.

5.3 Conversion from Professional Credit Certification to Bridge

All the components of the integrated open talent training mode in secondary and higher vocational colleges are connected through credit certification conversion.

The learners who have already had the National Education Series secondary schools, technical schools, vocational secondary schools or have participated in the National Education Series secondary schools, technical schools and vocational secondary schools. Entering the Yunnan Open University specialization degree, the original course name is the same or similar, the teaching content relevance or cohesiveness is strong, according to the course teaching requirements (course standards), can be identified and converted to the corresponding credits of the Yunnan Open University.

The learners who take part in the training of skills, majors and posts and obtain the training certificate depend on the level and content of the training. It can be identified and converted into some or all of the credits of the corresponding courses of Yunnan Open University, and various skills training can be realized to the Yunnan Open University.

5.4 Taking the Application of Modern Information Technology as the Basic Characteristic

Modern information technology is affecting people's life, study and work with unprecedented depth and breadth. The integration of modern information technology and education and teaching is conducive to improving the efficiency and quality of education and teaching. The construction of the open-ended talent training mode of middle and high vocational education fully applies modern information technology: one is to build rich online course resources; the other is to develop computer virtual simulation training system; the third is to promote the hybrid teaching mode in teaching methods application.

5.5 Implementing flexible education system

The integrative and open talent training mode of secondary and higher vocational education is an open connection mode, which implements flexible education system and is effective eight years after registration [4]. This model uses information technology to integrate the design of open education and vocational education, and adopts appropriate teaching organization to complete both secondary and higher vocational courses. According to the general rules of education and teaching, students must study at school for 3 years and the minimum graduation period is 4 years. The school study time and minimum graduation period are shown in Table 1.

Table 1 Study time at school and minimum length of graduation

Learning type	Years of schooling				
Study time at school	3				
Graduation years	4	5	6	7	8

★Note: the value is based on the training plan for professional talents: "the length of schooling for specialized subjects in Open University is 3 years, and the student status is valid for 8 years after registration."

6. Conclusion

Lifelong education is the trend of modern education development. The integrated and open talent cultivation mode of secondary and higher vocational education follows the basic laws of education and teaching, centering on curriculum cohesion, based on skill cultivation, transforming credit certification into a bridge, and taking the application of modern information technology as its basic characteristics. It is an important way to realize the connection of education at different levels in the vocational education system. It provides an example for the construction of the medium-high vocational education talent training model and the vocational education system, and also provides an effective way for the construction of the lifelong education system.

Acknowledgement

Yunnan Province high-quality vocational colleges, high-level backbone specialty - printing media technology professional construction projects.

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