

The Value Implications of Distributed Schooling in Higher Vocational Institutions

-- Taking Wenzhou Polytechnic as an Example

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Abstract

Distributed schooling in higher vocational colleges is a new mode of schooling, schooling concept, schooling form and schooling characteristics in the field of higher vocational education, and it is of great significance to fully understand its scientific connotation and profoundly grasp its value of the times, in order to ensure the correctness of the direction, the appropriateness of the strategy, and the flexibility of the idea in the process of practice. This paper explains the concept of distributed school-running and its connotation by analogy with "distributed computer", and takes the distributed school-running practice of Wenzhou Polytechnic as an example to clarify the value of distributed school-running in higher vocational colleges and universities in the era.

Keywords

Higher vocational colleges, distributed schooling, value.

1. The Scientific Connotation of Distributed Schooling in Higher Vocational Colleges and Universities

The concept of "distributed" is taken from "distributed computer". Usually computers are composed of a single central processor and other corresponding structures, but distributed computers are different. It consists of multiple processors, which are connected to each other using a network and are equipped with multiple computer hardware. ^[1]Distributed computer multiple processors and no main processor and backup processor points, the processor is coordinated with each other, this system structure will be previously dispersed processor connection, reduce the load on the central processor, and also to avoid the host hardware structure of the complexity of the chain of accidents brought about by the reaction, so that the computer to deal with the information and fault analysis ability to continue to improve the results are more reliable.

"Distributed schooling" is different from most of the "multi-campus schooling", does not only refer to the extension of school space, to achieve the expansion of the scale of the school mode of simple replication, in multi-campus schooling, in addition to the physical space between the campuses, is not completely independent, there is often a relatively unified management mechanism. There is a relatively unified management mechanism. In contrast to "group-run schools", group-run schools place more emphasis on the "large-scale" effect of "big and comprehensive" to play the role of the group, and are often formed by multiple schools to achieve benefit sharing and resource exchange, with multiple and completely independent schools. The group is often composed of several schools to realize the sharing of benefits and resources, and the composition of the exchange, there are a number of completely independent of the main body. ^[2]Distributed schooling and multi-campus schooling, group schooling, although the same physical division of space, but the campuses in the relatively independent at the same time more emphasis on its connectivity, more diversified in the mode of operation,

each campus has its own unique schooling resources and school philosophy, contrary to the homogenization of the pursuit of special features, differentiated development.

Analogous to distributed computers, distributed computers in the relationship between the central processor and multiple processors, as distributed schooling in the central campus and the relationship between the branch campuses, the branch campuses are not divided into primary and secondary, but the relationship is close, mutual coordination, on the one hand, to make up for the central campus to run the space constraints of the pressure to alleviate the burden of the central campus, on the other hand, it can also maintain the relative independence of their own ability to use, On the other hand, it can maintain relative independence and utilize its own ability, resources and other conditions to realize self-development, thus enhancing the school's overall ability and level of schooling. Wenzhou Polytechnic, for example, the school is fully embedded in the Wenzhou Industrial Cluster and the construction of the metropolitan area, the government, schools, lines and enterprises in four directions to create a linkage of "east, west, south, north and south" distributed school layout, has built Lucheng College, Rui'an College, Yongjia College, Wenzhou Design College, to make up for the lack of space in the center of the Higher Education Park Campus School short plate At the same time, the secondary colleges according to local conditions, and regional benign interaction, through their own development as a whole to lift the school running strength, and promote the school to achieve leapfrog takeoff.

2. Diversified Concept of Distributed School Running

Distributed school running of higher vocational colleges and universities will organically unite several resources in the region, with the purpose of effectively improving the efficiency of school running, and realizing the optimal allocation and efficient use of higher vocational education resources in the region through resource sharing and complementary advantages among different campuses. It is not only geospatial distribution, but also emphasizes the close connection with the central campus, implying the concepts of openness, diversity and integration.

Distributed schooling is open and emphasizes the need to operate in the context of open schooling, which is an important feature that distinguishes it from the traditional model. The traditional school is closed and monolithic. It mainly consists of a fixed number of parts, some even only a few classrooms and an office, and usually has a strict fence, so educational and teaching activities are usually limited to a specific scope. Distributed schooling breaks the closure and limitation of traditional schools, and the school is not only the main body of distributed schooling, but also the main body of open educational resources, and the main body of educational and teaching activities, forming a wider range of community, and at the same time, facing the society and the industry to carry out the training of talents and the innovation of the mode of schooling, in order to better serve the economic and social development of the region.

The concept of pluralism embedded in it is mainly reflected in the pluralism of the governance structure, the pluralism of the school-running mode, and the pluralism of the talent training mode, etc. Distributed school-running broadens the social participation. Distributed schooling broadens the social participation, attracts different attributes, different types, different industries to engage in education and teaching activities, builds a "government, school, line and enterprise, four-way linkage" mechanism, school, government, line and enterprise and other diversified subjects to participate in the school of common governance, co-construction, and fully realize the effective sharing of social resources; in the mode of schooling, the school of different school districts emphasizes the differentiation and specialization of the development of different school districts, and different campuses have different modes of schooling. As

mentioned above, distributed schooling emphasizes the differentiation of the school district, the characteristics of the development of different school districts are no longer subject to the constraints of a unified model of schooling, can be adapted to local conditions, the formation of their own characteristics of the pluralistic model of schooling. Wenzhou Polytechnic, for example, Rui'an College to Ruili Industrial College as a carrier, to explore the mixed ownership mode of school running, Lucheng College adhere to the "training and training", and actively carry out high-level social training; in the training mode, each campus according to the characteristics of the source of students, talent cultivation goals and other aspects of the difference between the use of different strategies, for example Yongjia College of Wenzhou Polytechnic combines the advantages of running schools with secondary schools in one place, mainly exploring the "3 + 2" integrated talent training mode of secondary and higher vocational training, and designing colleges relying on the advantages of running schools in characteristic towns and industrial parks. The implementation of the "2 + 1" talent training model, so that the graduating class students fully integrated into the enterprise production and practice, for the fashion design industry to deliver more high-quality technical and skilled personnel.

Integration is another important concept of distributed school running. First, integration with the region, the campuses through the sinking school, the campus built directly in the county, embedded in the county's economic development; second is the integration with industry, in order to adapt to the development of county industries, through the optimization of the professional structure, the rational setting of the curriculum, so that the teaching is more close to the local industry, more practical value, and take the initiative to solve the problems for the local industry to provide intellectual support; third is the implementation of the integration of talent cultivation. On the one hand, it cooperates with county units to carry out directional education, cultivate high-quality applied talents who meet the needs of structural transformation of county economy; on the other hand, it makes use of its own teachers' advantages to carry out continuing education and social training for enterprise employees, so as to improve the overall quality level of enterprise technical and skilled personnel.

3. The Value of Distributed Education in Higher Vocational Colleges and Universities in The Era

3.1. Macro perspective: the development demand of promoting the modernization of vocational education

The modernization of vocational education has the inevitability of the times. While having the commonality of education modernization, it should reflect the characteristics of vocational education and continuously enhance the adaptability of vocational education, which is the development demand of promoting the modernization of vocational education. How to enhance the characteristics and adaptability of vocational education, there are many measures, including the strengthening of the type of characteristics, institutional mechanism reform, education and teaching reform, the deep integration of industry and education, modern governance system, and so on. Specifically, this is mainly reflected in the establishment of three "modernizations": first, the establishment of a modernized mechanism for the integration of industry and education to adapt to the new industrial layout. The integration of industry and education and school-enterprise cooperation is the lifeline of vocational education and the only way for the high-quality development of vocational education. As the most closely related education of industrial economy, vocational education must be adapted to the development characteristics and needs of industrial economy. Secondly, it is to establish a modernized talent cultivation mode and adapt to the new talent demand. Vocational education has a bottoming function and support function, in the face of the new job demand spawned by the background of the new industry, new mode, new retail and new technology, vocational education talents

must adapt to the changes of the new technology and new jobs ahead of time, and provide talent support for the high-quality development of the economy and society. Third, the establishment of a modernized governance framework structure to adapt to the new development requirements. The modernization of the governance system and governance capacity of higher education institutions is an important part of the modernization of the national governance system and governance capacity, and it is the inherent demand of the universities in the new era to promote the connotative development and enhance the comprehensive competitiveness, and it is necessary to take the construction of the governance framework structure as the entry point to provide a strong guarantee for the high-quality development.

The distributed operation of higher vocational colleges and universities provides a fertile platform foundation and a broad development space for the realization of the above "modernization". Wenzhou Polytechnic, for example, Wenzhou Polytechnic to take the initiative to integrate into the Wenzhou metropolitan area and industrial clusters, government, schools, lines and enterprises to create a "five community", the formation of "east, west, south, north, south, central and foreign" distributed schooling new pattern, to promote the modernization of the vocational education system Construction: Rui'an College in the south, to create a municipal industry and education consortium, is one of the first batch of higher vocational colleges and universities in the country to cooperate with the county government to run schools, and has become a model for higher vocational colleges and universities to serve the economic development of counties; Yongjia College in the north, to create a community for the articulation of high school and high school, and is the first college of the country that runs schools in the middle and high school one-location type of integration, which empowers rural high-quality revitalization; Wenzhou Design College in the west, to create a community for the industry and education and is the first college and university to be stationed in a provincial characteristic town. It is the first university in China to be stationed in the provincial characteristic town; to the east of Lucheng College, it builds a social training service base combining education and training. With the Municipal Bureau of Economics and Information Technology, we have jointly organized the first enterprise comprehensive service platform operated by colleges and universities to build a digital vocational education community, which has been evaluated as a national and provincial demonstration platform; we have also built a digital training building in the Center Higher Education Park Campus to create a science and education fusion community, which is the first "industry-academia-training-research-creation-utilization" complex for the digital industry chain of the nation's higher vocational colleges, serving the digital industry and creating a new community of education. It is the first "industry-academia-training-research-creation-utilization" complex for higher vocational colleges in China to be built on the basis of the digital industry chain to serve the development of digital economy. The construction of the "five communities" has fully enhanced the school's support for regional industries, improved the quality of talent training, and promoted the organic convergence of the education chain and talent chain with the science and technology chain, industry chain and innovation chain. Meanwhile, in the practice of school running, Wenzhou Polytechnic has gradually explored, summarized and perfected the governance system of Wenzhou Vocational College, which is based on the party building as the core, pluralistic common governance as the main body, vertical top-level layout - middle-level operation - grass-roots level innovation as the support, and horizontal "five-in-one" as the basis, and continues to push forward the construction of the governance mechanism, governance capacity and governance culture, and promote the realization of the school governance system. The construction of governance mechanism, governance capacity and governance culture has been continuously promoted to realize the iterative upgrading of school governance from self-governance to co-governance to good governance, and to build a new pattern of "double-cycle governance" with efficient internal operation, smooth external relationship and effective

internal and external connection, which has accumulated a number of replicable and popularizable models to realize the modernization of the governance capacity of institutions of higher education. It has accumulated a batch of new experiences and paradigms that can be replicated and popularized to realize the "modernization" of governance capacity of higher vocational colleges and universities.

3.2. Medium perspective: a feasible choice for building a sustainable vocational education system

Since 1985, there have been more than 30 years of exploration on the articulation of middle and high school education. In 1998, some scholars even put forward the implementation of three years of secondary school, two years of junior college, two years of undergraduate "322" model of undergraduate and higher vocational education. [3] Whether it is "middle-high vocational" articulation, "middle-high local" articulation or "local" articulation, the core is to adapt to the national demand, the new national strategic demand, and realize the organic articulation of talent cultivation between different levels. The core of the articulation lies in adapting to the national demand and the new national strategic demand, and realizing the organic articulation of talent training between different levels. On the one hand, this kind of articulation can realize the internal coordination of the vocational education system; on the other hand, it is in line with the growth law of high-quality technical and skilled talents, that is to say, it is in line with the demand for the cultivation of vocational ability of professionals at different stages. In addition to vertical articulation, horizontal integration of universal vocational education is also an important part of building a sustainable vocational education system. In fact, however, there are still considerable constraints in realizing the articulation of secondary and higher vocational education and the integration of universal vocational education. For example, in terms of cultivation orientation, although they belong to different types and levels, there still exists the phenomenon of cross overlap, which has not been further clarified; in terms of professional connotation, there exists the situation of "the same name with different meanings", "different names agree with each other", etc., which is lacking in unity and continuity; in terms of curriculum, there is a lack of effective articulation programs and a lack of effective integration programs. In terms of curriculum, there is a lack of effective articulation programs and curriculum standards, which is often a simple patchwork of courses and mechanical additions. It is because of the existence of these factors, although many districts have actively explored and tried, but most of them still remain in the form of academic qualifications "grafting" or localized curriculum content articulation, failing to truly achieve effective coherence and integration. [4]

Distributed schooling provides practical samples and reference paths for solving the above problems. Wenzhou Polytechnic Yongjia College to carry out "3 + 2" in the integration of vocational schooling to take as an example, breaking the original physical space between the high school, in Yongjia Vocational Education Center on the basis of setting up a high vocational department and the Department of vocational department, will be built in the same "under the roof". This mode of schooling breaks through the shackles of time and space, and its coherence is thorough and fundamental. It is mainly reflected in the following aspects:

3.2.1. Linkage management to enhance the effectiveness of collaboration

Yongjia College in the existence of middle school, high school, Zhejiang operators and other tripartite subjects, belonging to different higher departments. Higher vocational department schooling body for Wenzhou Polytechnic, is Wenzhou Polytechnic of secondary colleges; Secondary school department schooling body for yongjia county people's government listed Wenzhou Polytechnic affiliated yongjia secondary vocational school. Under the same "roof", two different school sponsors, two different levels of education types, the management system puts forward high requirements. In order to solve the drawbacks of management brought by

the "two subjects on the same campus", Yongjia College's middle and high vocational departments jointly set up a campus management committee, which is the highest decision-making body for internal management of the campus, and makes decisions and deliberations on major matters on the campus through weekly regular meetings, etc., and introduces management methods such as the Code of Conduct for Teachers and Students on Campus, etc. in accordance with the characteristics of the management of the middle and high vocational departments. College Teachers and Students Campus Civilized Behavior Code Guidelines" and other management methods, to achieve unity in the management system, greatly enhance the effectiveness of collaborative management, maintain the order of school running, and ensure campus safety and stability.

3.2.2. Top-level design coordinates talent cultivation

As mentioned above, a clear positioning of talent cultivation is a prerequisite for effectively promoting the horizontal integration and vertical coherence of different types of education. Due to the lack of clear and explicit talent cultivation positioning, there is often a situation of misplaced talent cultivation between secondary education and higher vocational education. In order to solve this problem, Yongjia College implements the five-year technical skill talent cultivation mode of middle and high vocational integration, led by the high vocational, middle vocational synergy, the corresponding profession establishes the middle and high vocational integration teaching and research group, designs the five-year talent cultivation program together and organizes the implementation in a unified way, which realizes the consistency and unity of the cultivation goal of the students of the five-year long academic system. Meanwhile, in order to ensure the continuity and coherence of cultivation, improve the quality supervision of talent cultivation, and ensure that the requirements for entrance to higher vocational education are met when intermediate vocational education is promoted to higher vocational education, Yongjia College has set up a set of five-year full-academic-completion-coverage supervision and evaluation system, taking the enterprise, intermediate vocational education and higher vocational education as the main body of evaluation, and relying on the evaluation system of the test of vocational tendency of professional acceptance of junior high school graduates, the inspection of the results of the internships of the enterprise, and the transfer selection of intermediate and high school advancement. Effectively guarantee the quality of talent cultivation.

3.2.3. Effective articulation of professional courses

The phased cultivation has short-sightedness and uncertainty, Yongjia College takes the advantage of one-place integrated cultivation, takes the demand of local economy for talents as the fundamental, carries out professional development and professional construction together, and forms the professional construction standard with overall unity and content undertaking. In addition, the curriculum arrangement focuses on the interconnection of intermediate courses and higher vocational courses, avoiding the problems of duplicated courses and missing courses, realizing progressive and gradient development, gradually guiding the students to learn and master from the basic skills to the advanced technology, and forming the phase undertaking and curriculum system from easy to difficult, from learning to application, so as to truly realize the effective coherence.

3.2.4. Optimization of resource allocation and sharing

The resources referred to here include the comprehensive sharing of teaching resources, school sites, teachers and other human and material resources, which is the significant advantage of Yongjia College's one-place integrated schooling. Under this mode of school running, the middle and higher vocational departments can share campus public resources such as libraries, laboratories, classrooms, internship and training centers based on the resources and unique endowments of the middle and higher vocational departments themselves, and establish a list

of middle and higher vocational resources, which can be updated and interacted with on a regular basis. In addition to hardware and software resources, the exchange and interaction of teachers is a prerequisite for the articulation of professional courses. Running a school under the same "roof" allows secondary and higher vocational teachers to enjoy sufficient opportunities for face-to-face exchanges, and to improve their systematic understanding of the whole teaching process while enhancing their personal teaching level and ability through part-time jobs and postings, thus better serving the secondary and higher vocational teachers. and thus better serve the integration of middle and higher vocational talents training.

As an important part of Wenzhou Vocational and Technical College's distributed schooling, Yongjia College breaks through the traditional spatial shackles, and explores the middle- and high-vocational articulation program that can be used as a reference by the national vocational education community with its unique spatial layout and schooling form. Although it only involves the articulation of secondary and higher vocational education, the management system, quality control system, and professional course articulation program formed in its practice still have significance for the mutual integration of general education and vocational education, and provide feasible choices for the promotion of the articulation of secondary and higher vocational education, the integration of general education and vocational education, and the construction of a vocational education system for sustainable development.

3.3. Micro Perspective:Realistic Path to Realize High-Quality Connotative Development of Vocational Colleges and Universities

3.3.1. Effectively broaden the space for running schools

With the development of higher education, many colleges and universities are facing problems such as insufficient space for running schools. In the absence of relevant policy support and guidance, schools take the initiative to "outside" to "land", the implementation of distributed schooling is an effective way to expand the school space. Since 2016, Wenzhou Polytechnic has been planning ahead, ahead of the layout, and started to build "east, west, south, north, center and foreign" distributed school layout, establishing Rui'an College in 2016, Yongjia College in 2021, Wenzhou Design College in 2022 and Wenzhou Vocational College Yalong Silk Road College in 2018 overseas, breaking the total area of the campus from more than 400 acres to more than 1,100 acres, which can accommodate nearly 20,000 students, with a total investment of more than 4 billion yuan. College of Technology Yalong Silk Road College, breaking the total area of the campus from more than 400 acres to more than 1,100 acres, which can accommodate nearly 20,000 students, with a total investment of more than 4 billion yuan, gradually alleviating the original highly tense situation of teaching, scientific research and living rooms, improving the material basis of teaching, scientific research work and the living conditions of teachers, students and staff, solving in one fell swoop the problem of insufficient space for the development of the school, expanding the scale of school running and the The expansion of the school space has greatly improved the social influence and the overall level of school running. Expansion of school space for the school's internal environment provides the time and conditions, Wenzhou Polytechnic will immediately be temporarily shelved due to space constraints in the early stages of the integration of faculties and campus morphology to organize the agenda, supply demand-oriented, functional integration as the main line, faculty integration as a prerequisite for the internal potential for the focus of the priority for the integration, to play the benefits of the consideration, the formation of the ten secondary colleges , unique, ten perfect, the school glows with new vitality vitality, set off a new chapter of development.

3.3.2. Effectiveservice local economic development

Local economic development requires workers to continuously improve their quality to better adapt to social needs. Strengthening adult education and social training is also an important

responsibility of higher vocational colleges and universities. In this regard, Wenzhou Polytechnic, relying on Lucheng College in the east of the country, "combines education and training", focuses on the national economic and social development strategy, and actively carries out the teacher training, vocational training, skill appraisal and qualification certification of adult higher education and non-degree education for the society, so as to enhance the professional social training and service capacity, improve the quality of labor force of the society, and help to build a lifelong learning and development system. It also enhances the professional social training and service capacity, improves the quality of the entire social labor force, and helps to build a lifelong learning society and a skill-based society. It is relying on the distributed school layout of "East, West, South, North, Central and Outside", Wenzhou Polytechnic secondary colleges according to local conditions, to form their own characteristics, targeted to realize from "embedded" to "integration", "regional industrial layout," and "integration". "Regional industrial layout, from "fit" to "integration" of industrial development, high-quality service to the local economy.

3.3.3. Effectively improve the quality of talent cultivation

Distributed school layout of higher vocational colleges and universities in the original integration of industry and education on the basis of further broadening the depth and breadth of the innovative mode of school-enterprise cooperation, to further solve the problem of technical and skilled personnel training and production practice is out of step with the problem, to enhance the quality of talent training is of great benefit. Wenzhou Design College, for example, Wenzhou Design College directly built the campus in the characteristics of the town, run in the industrial park, breaking the physical constraints between schools and enterprises, realizing the space on the "zero distance". College and the international fashion capital of Milan, Italy ACME Academy of Fine Arts cooperation to introduce top fashion design resources, and actively introduce domestic and foreign industry masters and leading talents to establish more than 20 masters studio. Students can be stationed in the masters' studios during their school years to carry out comprehensive practice projects, research and development of real projects in enterprises, and participate in the whole process of first-line product production. Compared with the traditional industry-teaching integration to guide and mobilize enterprise resources into the school practice, Wenzhou Design Institute to achieve the sharing of resources between schools and enterprises, the enterprise's real production data that is the school's teaching resources, this industry-teaching integration is more immediate, scene and authenticity, pay more attention to the simultaneous accumulation of students' theoretical knowledge and practical experience, and almost realize the development of talent capacity training and industry demand "Zero time difference", effectively changing the current status quo between the chain of higher vocational talents and the regional industrial chain. Taking Rui'an College as an example, Rui'an College actively explores the mixed ownership mode of school running, and establishes a mixed ownership industrial college with Ruili Group - Ruili Industrial College, giving full play to the school's strengths in talent cultivation, scientific and technological research and development, and integrating the advantageous resources brought about by the leading position of Ruili Group in the market of automotive parts and components intelligent manufacturing, and working together to Develop professional talent training programs, curriculum content standards and other content, so that the teaching process accurately docking job demand, cultivate high-quality technical and skilled personnel, and help students realize the "on-the-job" seamless connection.

4. Conclusion

Vocational education is becoming increasingly important nowadays, and promoting its development is widely expected. Taking Wenzhou Polytechnic as an example, we have seen the

feasibilities. Distributed Schooling in Higher Vocational Institutions Providing more possibilities, on the one hand, it can solve the constraints of educational space, and on the other hand, it can interact more deeply with local economy, cultivate professional and technical talents that meet local needs, and promote local industrial development.

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