

Thoughts on constructing non-academic education and training system for higher vocational colleges with industry characteristics

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Abstract: Non-degree education occupies a relatively important role in vocational education, but at present, non-degree education in the field of higher education mainly focuses on research from the perspective of undergraduate colleges, and less from the perspective of higher vocational colleges. As the main force of vocational education, vocational colleges and universities occupy the advantages of the industry and profession, and should give full play to their advantages to play an important role in the development of vocational education. Therefore, from the perspective of industry-characteristic vocational colleges, this paper analyzes the connotation, significance and difficulties faced by non-degree education in vocational colleges, and puts forward the strategy of building a non-academic education and training system of "two platforms + one alliance" industry-characteristic vocational colleges, which provides ideas for non-academic education in vocational colleges.

1. Introduction

Non-degree education is an important part of the talent training of vocational colleges, an important way for vocational colleges and universities to serve the national strategy and economic and social development, an important channel to meet the diversified learning needs of the people, and an important support for promoting lifelong learning and the construction of a learning society for all people. In November 2021, the General Office of the Ministry of Education issued the Regulations on the Administration of Non-degree Education Organized by Ordinary Colleges and Universities (Trial) (hereinafter referred to as the Provisions), which further clarifies the policy recommendations for the standardized management of non-degree education and puts forward normative requirements for further development of non-degree education. As an important part of China's colleges and universities, in carrying out non-degree education, higher vocational colleges and universities should give play to the characteristic advantages of their industries, form a non-degree education and training system of higher vocational colleges with industry characteristics that conforms to the concept of modern vocational education, and play a greater role in regional economy and regional talent training education.

2. Connotation of non-degree education in vocational colleges

It is mainly about job training and education for members of society, especially those who have left formal education but need to adapt to the demands of technological and informational advancements. These programs are established by leveraging the strong educational resources of universities to improve vocational skills and offer training in various fields, as well as leisure and recreational activities. Essentially, it can be seen as "sustainable development education for talent".[1]

In China, non-degree education has included a variety of forms of education, including single-subject completion certificate education, professional certificate education, continuing education, on-the-job training, practical technical education and social education, but due to various reasons, it has not been effectively promoted in society. At present, the non-degree education carried out by vocational colleges and universities mainly focuses on skills training and enterprise training, which is mainly used to meet the needs of employee training and further training in some industries. In the "Provisions" issued by the General Office of the Ministry of Education, the following explanation is made for non-academic education: "Non-academic education as used in these Provisions refers to all kinds of training, further education, training, counseling and other educational activities organized by colleges and universities for the purpose of improving the professional quality, vocational skills, cultural level of the educated or satisfying personal interests in addition to academic education. According to this, the connotation of non-academic education can be understood as focusing on the professional job skills, professional qualities and job adaptability cultivation of the educated. And these points happen to be the advantages of vocational colleges [2].

3. Significance of non-academic education carried out by industry-characteristic vocational colleges

Industry characteristic vocational colleges, referred to as: industry universities, refer to higher vocational colleges with industry characteristics in China's higher education system, oriented to the industry and serving the industry. Involving agriculture, forestry, water conservancy, geology, minerals, petroleum, electric power, communications, chemical industry, construction, transportation, finance and economics, politics and law, media and other fields, it has provided a large number of talents for the development of the industry for decades, and has also formed a distinct and stable type of school, discipline characteristics and service orientation. Industry-specific vocational colleges may not be very dominant in comprehensive ability, but they are often very distinctive in professional fields and recognized by the industry. The training programs of such colleges and universities are often more industry-specific and innovative, with pure discipline precision, one or two national or provincial "double-high" majors, and profound industry heritage and discipline accumulation. Therefore, it is of great significance for non-degree education to be carried out in industry-characteristic vocational colleges.

3.1 An important role in promoting the regional economy

As highly specialized colleges, industry-characteristic vocational colleges and universities must be closely related to the strong or characteristic industries or industries in the region. For a region, characteristic industries are an important carrier of regional economic development. Industrial development depends on scientific and technological progress. Therefore, in the economic development planning of various places, there are many examples of preparing to build characteristic universities as "experimental fields" for the development of innovative industries. On

the one hand, universities with industry characteristics can provide the talents needed for the development of regional characteristic industries, and on the other hand, they can also lead the continuous innovation of the industry.

3.2 Consolidate characteristic disciplines and cultivate characteristic talents

In the 14th Five-Year Education Plan documents issued by various provinces and cities, consolidating a number of characteristic disciplines, forming regional characteristic advantages, and cultivating professional talents for social needs have become the focus of construction. This is also complementary to the initiative to encourage industry-specific vocational colleges to carry out non-degree education. Industry characteristic vocational colleges can reflect the cultivation of talents from focusing on knowledge to focusing on ability, as one of the future orientation of education, industry vocational colleges have innate advantages, can provide a good foundation for discipline development and professional talent training [3].

3.3 Targeted education and improvement of the education system

Industry-characteristic vocational colleges have always been an important force in China's higher education, occupying an important position in the higher education system and having a very important influence in the field of higher education. The cultivation of characteristic talents in industry-characteristic vocational colleges is conducive to more targeted professional education for the educated, cultivate special talents, echo the academic education of higher vocational colleges, and form a more complete education system.

With the increasingly urgent demand for industrial transformation and upgrading in China, the demand for non-academic education for all kinds of talents is also rising. In accordance with the requirements set forth in the previously issued "Implementation Plan for the Reform of National Vocational Education" by the State Council, and in response to the rapid development and demands of the era, it is an effective approach for specialized higher vocational colleges with industry characteristics to break away from the traditional thinking of educational credentials. And it can open up educational resources to the society, and vigorously carry out non-degree education. This approach enables them to fulfill their talent cultivation functions, ensure their sustainable development, and better serve the local economy. [4].

4. The dilemma of promoting non-degree education in industry-characteristic vocational colleges

Non-degree education has always been an important part of colleges and universities, especially their continuing education, and it is also an important embodiment of vocational colleges with industry characteristics to serve the society. Continuing education in many vocational colleges often includes both academic and non-academic education. Compared with traditional academic education, without the blessing of academic qualifications, non-academic education emphasizes the school brand and course quality, which is more market-oriented and fiercely competitive. Some well-known universities rely on brand advantages, and in recent years, they have become prosperous and become independent brand non-degree education universities. But related to this, some problems have also arisen.

First, the reality of non-degree education in vocational colleges and universities is that all vocational colleges and universities as a whole have insufficient understanding of the importance of non-degree education and lack strategic planning. Many vocational colleges and universities regard academic education as the main teaching task, allocate most of the resources to academic education,

and put non-academic education in an insignificant position, this wrong understanding of non-academic continuing education makes the development of non-academic education in vocational colleges and universities linger, and even regress [5].

Second, the teaching form is single, and there is no scale effect and brand advantage. Most vocational colleges and universities follow the practice of formal education, and even many courses and textbooks are directly copied from full-time education. They lack the connection and relevance between the advantages of industry-specific vocational colleges, disciplines, majors, and faculty. They have not developed training programs tailored to industry characteristics and job requirements, resulting in a lack of contribution to the development of industry human resources and a loss of market recognition, reputation, and brand.

Third, there is a lack of corresponding evaluation mechanisms and social recognition mechanisms. After the completion of non-degree education in vocational colleges, their educational achievements lack a corresponding evaluation guarantee mechanism and a whole-process training and teaching management supervision mechanism, and there is also a corresponding mutual recognition mechanism between training units[6].

Fourthly, Most vocational colleges and universities do not apply enough new media technology, and fail to systematically develop new media technology platforms, provide online courses, and improve the distance education system to achieve cross-regional teaching. It also rarely uses the Internet to establish non-academic education platforms and new online education platforms, making it difficult for vocational colleges and universities to provide flexible learning models for the society. There is no perfect training optimization tracking and filing mechanism, and there is no way to obtain the feedback of the trainees participating in the training, as well as the personal learning experience of the trainees and the channels and ways to suggest the optimization measures of the training project.

5. Construction strategy of non-degree education and training system of industry-characteristic vocational colleges

The 'Regulations' provides clear policy guidance and specific normative requirements. After understanding the spirit of the 'Regulations' deeply on this basis, vocational colleges can fully leverage their educational resources advantages, based on the characteristics and professional strengths of the school, to carry out high-quality non-degree education and training. This is to fulfill the social responsibility of vocational colleges in serving society, industries, and regional economic revitalization. Therefore, vocational colleges, especially vocational colleges with industry characteristics, should conduct research on non-degree education from the direction of scientific positioning and building a systematic framework, so as to form a systematic and branded non-degree education and training system [7].

5.1 Relying on industry advantages, scientific and reasonable positioning

Higher vocational colleges and universities aim to cultivate high-level technical and skilled talents, with adaptability, intermediary, individuality and practicality, and have different experimental training bases and dual-teacher teachers from ordinary colleges and universities. The non-degree education held by vocational colleges and universities is mainly to provide vocational skills training for industry enterprises, implement flexible and diverse high-level training to enhance job competitiveness, and focus on adding new knowledge, pursuing personal development and improvement, and cultivating ability. This provides a basis for the non-degree education of industry-oriented vocational colleges to implement the guiding ideology of running a school into the principle of talent training and serving the society. At the same time, through docking with the

industry, fully investigate the practical needs of industry enterprises for talent positions, and formulate non-degree education and training programs that reflect the characteristics of vocational colleges and universities and meet the requirements of industry enterprises to meet the major strategic needs of the country and the development needs of the public [8]. On the one hand, we must persist in cultivating people with virtue and strengthen the attributes of vocational education. Explore innovative management mechanisms, "open schools" to the market, according to market demand, and participate in market competition in accordance with market rules. On the other hand, it is necessary to fully study the cutting-edge dynamics of non-degree education in vocational colleges with industry characteristics at home and abroad, learn advanced experience, rely on the influence of the province's higher vocational colleges in the industry, enhance the contribution of non-degree education in the training of talents in the industry and the market awareness and reputation of the brand, build brand effect, and strive to achieve brand operation.

5.2 Strengthen information management, give play to comprehensive advantages, and build a new pattern of non-academic education

5.2.1 Establishment of a systematic education and teaching management system platform

The "Provisions" requires that "colleges and universities should establish a non-degree education teaching management system and quality assurance mechanism, strengthen the management of project design, curriculum research and development, teaching organization, effect evaluation, etc., clarify teaching objectives and planning arrangements, strictly study discipline and attendance assessment, and strengthen student management". Through systematic design research, starting from top-level design ideas, drawing on the existing experience of academic education, we will build a scientific, reasonable and integrated non-academic education teaching management system that meets the development requirements of the industry. Through the "Online Feedback and Evaluation System V1.0 for the Quality of Non-degree Education and Training in Higher Vocational Education", an education and teaching quality evaluation and assurance system that meets the characteristics of non-degree education has been established. Through the operation of this system, we can fully grasp the effectiveness of non-academic education and training systems. We can use feedback and evaluation to strengthen project design and curriculum development. From the perspective of training effectiveness and corporate needs, we can enhance the adaptability of training programs and content to meet the needs of companies. This will further improve the flexibility and effectiveness in line with local socio-economic development. By utilizing the professional advantages of vocational colleges, we can establish a standardized, systematic, and branded training system platform for non-academic education that is distinct from privately-run educational institutions.[9].

5.2.2 Creation of a non-academic education teaching platform based on "Internet +"

In the context of the rapid development of the Internet, fixed-time, large-scale learning has gradually been replaced by fragmented learning, especially in the field of adult education, due to the nature of work, available time and other factors, there is a need for a combination of online and offline learning and training mode. Therefore, when carrying out non-degree education, vocational colleges and universities can start from online resources, create an Internet-based information teaching platform, and carry out the construction of non-degree education teaching resources. Theoretical popularization education and training can be carried out through the construction of a series of convenient and convenient universal online courses. Through offline practical training, the full integration of theory and practice is carried out, so that trainees can improve both theory and

practice, and at the same time, they can make full use of fragmented time to improve training and learning efficiency. In the early stage of the construction of curriculum resources, outstanding teachers of vocational colleges and universities can be invited to participate in collaborative construction and develop education and teaching resources with a higher level. After receiving the feedback and evaluation results, experts from industry enterprises can be gradually increased and selected to participate in non-degree education and training. When selecting industry and enterprise professionals to teach, the admission criteria for teaching staff are formulated based on the actual conditions of the industry and enterprise. The teaching staff pool is dynamically adjusted, with emphasis on practical professional abilities and a weakening of requirements such as education and publications. By utilizing the internet to break geographical limitations, it provides industry and enterprise professionals with a broader perspective and professional skills beyond their local area. It also keeps track of cutting-edge trends and improves the construction of non-degree educational training platforms in the virtual space.

5.2.3 Creation of a horizontal evaluation mechanism and create an inter-school non-degree education alliance

After the completion of non-academic education and training, establish a corresponding educational achievement publicity mechanism, and conduct information retrieval and publication of students' learning and training experience, skill level, and training results through special channels of education and training platforms, forming social effects and improving the level of post-training management. At the same time, referring to the model of university alliances, we will carry out cooperation and exchanges in the direction of non-degree education in vocational colleges, fully utilizing high-quality educational resources and complementary advantages. We will establish a mechanism for mutual recognition and accreditation of educational achievements among vocational colleges, forming a channel for horizontal communication and mutual recognition of educational achievements among colleges and majors. Alliance members can jointly develop courses, exchange, learn from each other, and so on, forming a synergy in the direction of non-degree education. While building a horizontal platform for non-academic education and training, we can also consider expanding the scope of cooperation to the direction of academic education, and jointly play the demonstration and leading role of vocational colleges and universities in talent training.

In summary, for graduates and practitioners, when entering the actual work of industry enterprises, the suitability of their own technical skills and professional positions is more important. This requires vocational colleges and universities to closely follow the actual needs of industrial transformation and upgrading for high-level application-oriented talents, deeply analyze the job capabilities and qualities required by high-level application-oriented talents, comprehensively explore the growth law of high-level application-oriented talents in vocational education from the aspects of quality, knowledge and ability, and build a talent training model of "hierarchical classification and personality training" accordingly. According to the types and characteristics of vocational education, non-academic education is carried out to achieve deep integration of regional industry and vocational education. We will leverage the advantages of government, schools, and enterprises to jointly build professional and talent development platforms, establish a "interchangeable bridge-style training model" for the growth of professional talents in higher vocational colleges, facilitate the vertical development of talents in higher vocational colleges, connect the needs of higher vocational colleges and enterprises horizontally, and focus on cultivating a large number of high-quality technical talents who meet the needs of industries and possess excellent skills.

6. Conclusions

At present, most of the domestic research on non-degree education is from the perspective of undergraduate universities, and only a few are aimed at higher vocational colleges. Under the guidance of the "Made in China 2025" national action plan, the general trend of vocational education reform is to vigorously develop vocational education, which is undoubtedly a major opportunity for vocational colleges. While vigorously developing academic education, vocational colleges and universities should base themselves on China's national conditions and social needs, and actively explore non-academic education in which higher vocational colleges and regions coexist. In the context of lifelong education, research is conducted on the development strategies of non-degree education in vocational colleges, such as the reform of high-quality courses, the integration of resources, the exploration of blended learning models, and the formation of a non-degree education system with industry characteristics consisting of "two platforms and one alliance". The aim is to fully leverage the advantages of vocational colleges with industry and professional characteristics and play an important role in the development of vocational education.

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References

- [1] Hu Heng, Zhao Baozhu, Fu Xiaona. Analysis of the development connotation and strategy of non-degree continuing education in colleges and universities [J]. *Contemporary Continuing Education*, 2018, 36(02):29-33.
- [2] Gao Liping. Research on the orientation and development of non-degree continuing education in colleges and universities [J]. *Education Theory and Practice*, 2014, 34(21):20-22.
- [3] Wu Xuesong. Development strategy of non-academic continuing education [J]. *Education and Career*, 2014 (21): 54-55.
- [4] Wei Qiaoyan. Analysis and prospect of non-degree education in colleges and universities[J]. *Journal of Heilongjiang Institute of Education*, 2018, 37(12):10-12.
- [5] Zhang Yifan. Construction of evaluation index system of non-degree education and training in highway transportation industry [J]. *Education and Teaching Forum*, 2021(01):21-24.
- [6] Ji Ting. Research on non-degree education and training mode in Internet environment[J]. *China Training*, 2016(24): 112. DOI:10.14149/j.cnki.ct.2016.24.094.
- [7] Shao Liqun. Broaden the channels of adult non-academic education to serve the transformation and upgrading of local industries[J]. *Journal of Tongling Vocational and Technical College*, 2015, 14(03): 3-4+7. DOI: 10.16789/j.cnki.1671-752x.2015.03.002.
- [8] Huang Qin. Countermeasures for the development of non-degree education in public vocational colleges under the new situation [J]. *Knowledge Base*, 2017(04):68.
- [9] He Jinqi, Shen Guoqin. Analysis on the optimal development strategy of non-degree continuing education in industry-characteristic universities[J]. *Contemporary Continuing Education*, 2021, 39(02):10-16.