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International Current Situation Comparison and Enlightenment of the Development of Undergraduate Vocational Education

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Abstract

Vocational education is an important part of the modern education system. Vigorously developing undergraduate vocational education is a major measure to realize the "different types, equal importance" of vocational education. Undergraduate vocational education has become an important focus of vocational education research. Based on this, this paper compares and studies the development status of undergraduate vocational education in Germany and the United States, and points out that the development of undergraduate vocational education should clarify the school-running orientation, talent training objectives and development strategies, talent training should match market demand, construct an integrated development model, and there is an urgent need to change the public's traditional concept of vocational education.

Keywords

Undergraduate Vocational Education; Comparative Education; International Current Situation; Enlightenment

1. Introduction

Educational equity is one of the core values of the modern education system. It is not only related to the equal opportunity for individuals to receive education, but also involves the allocation of educational resources, teaching quality and the fairness of educational outcomes. In the field of higher education, with the global economy's growing demand for high-skilled talents, undergraduate vocational education, as an educational model between traditional academic education and vocational training, has gradually attracted the attention of various countries. However, the development of higher vocational undergraduate education shows diverse characteristics worldwide. The policies, implementation paths and social backgrounds of different countries have profoundly affected the realization of educational equity.

According to a study published in the Journal of Hubei Open Vocational College, the innovation of vocational education talent training models (such as the "integration of production and education - competition - innovation and entrepreneurship" model) emphasizes improving educational quality through scientific evaluation mechanisms. This provides inspiration for exploring educational equity in higher vocational undergraduate education: equity is reflected not only in access to education, but also in the fairness of the educational process and outcomes. By comparing the international development status of higher vocational undergraduate education, this paper analyzes its practices and challenges in terms of educational equity, and puts forward policy suggestions combined with China's reality, aiming to provide theoretical and practical references for building a fair higher vocational education system.

2. Theoretical Basis of Educational Equity

The concept of educational equity originates from the interdisciplinary research of philosophy, education and sociology, and usually includes the following three dimensions:

2.1. Equity of Access

Ensure that all individuals, regardless of their socio-economic background, gender, ethnicity, etc., have equal opportunities to receive education. The "Theory of Justice" emphasizes eliminating the impact of social inequality on educational opportunities through institutional design. Equity of access is the cornerstone of educational equity, but its realization requires an intervention logic beyond formal equality. Contemporary educational policies pay more attention to the "synergy between equity and efficiency", such as reducing later remediation costs through early investment. The focus of theoretical controversy has shifted from "whether to intervene" to "how to intervene scientifically". The development of big data and educational neuroscience has provided new tools for precise compensation.

2.2. Equity in Process

Focus on the allocation of resources, teaching quality and support systems in the educational process to ensure that students are treated fairly during their studies. The theory of cultural capital points out that students from lower socio-economic backgrounds may be at a disadvantage in the educational process due to the lack of cultural capital. Equity in process is a dynamic dimension of educational equity. It requires the education system not only to provide equal access to education, but also to ensure fairness in teaching, interaction, evaluation and other links. Future educational policies need to pay more attention to classroom practices at the micro level, enabling every student to truly benefit from the educational process through teacher empowerment, curriculum optimization and technical support.

2.3. Equity in Outcomes

Emphasize the equality of educational outcomes, that is, students can obtain similar career opportunities and social mobility after completing their education. The "Report on Equal Educational Opportunities" points out that the ultimate goal of educational equity is to narrow the gap in educational outcomes between different groups.

In the field of higher vocational undergraduate education, the realization of educational equity faces unique challenges. On the one hand, higher vocational undergraduate education aims to provide higher education opportunities for students with non-traditional academic paths, which theoretically promotes equity of access; on the other hand, due to its close integration with industry, the allocation of educational resources and opportunities may be uneven due to regional and industry differences, leading to the lack of equity in process and outcomes.

3. International Development Trends of Higher Vocational Undergraduate Education

As an emerging educational form, higher vocational undergraduate education shows diversified development worldwide. The higher vocational undergraduate education systems in countries such as Germany, the United States and the United Kingdom are relatively mature, while developing countries such as China and India are in a stage of rapid development. The "integration of production and education - competition - innovation and entrepreneurship" model mentioned in the Journal of Hubei Open Vocational College reflects China's exploration in cultivating applied talents in higher vocational undergraduate education. This model emphasizes optimizing educational quality through evaluation mechanisms, which indirectly provides a guarantee for educational equity.

International research shows that the development of higher vocational undergraduate education is closely related to educational equity. For example, Germany's dual-system education provides students from lower socio-economic backgrounds with opportunities to enter higher education through cooperation between enterprises and schools. Australia's Technical and Further Education (TAFE) system lowers the educational threshold through a flexible credit system and vocational certification. However, these systems also have problems. For instance, Germany's dual-system may channel students into vocational choices too early, limiting their academic development possibilities.

In China, the development of higher vocational undergraduate education started relatively late, but policy support has been increased in recent years. The "National Vocational Education Reform Implementation Plan" in 2019 proposed promoting the pilot of higher vocational undergraduate education, aiming to enhance the social status of vocational education. However, due to factors such as unbalanced regional economic development and differences in urban-rural educational resources, the

practice of higher vocational undergraduate education in terms of educational equity still needs to be further improved.

3.1. International Comparative Analysis

To thoroughly explore the practices of higher vocational undergraduate education in terms of educational equity, this paper selects Germany, Australia and China as comparative objects, and analyzes their characteristics and challenges in terms of equity of access, process and outcomes.

3.1.1. Germany: Equity of the Dual-System Education

Germany's dual-system vocational education is a model of higher vocational education worldwide, with its core being the combination of school education and enterprise practice. Students learn theoretical knowledge in vocational schools and receive practical training in enterprises at the same time. The advantages of the dual-system in terms of educational equity include:

Equity of Access: The dual-system provides opportunities for students with weak academic performance or limited economic conditions to enter higher education. According to data, about 50% of German students choose the vocational education path, which is much higher than that in other developed countries. Germany's dual-system has advantages in equity of access in terms of opportunity accessibility and economic support, but social capital dependence and early tracking still lead to class solidification. Its experience shows that the deep participation of enterprises is the key to the success of vocational education, but policy constraints are needed to avoid discrimination; compensation mechanisms can partially alleviate unfairness, but cannot fundamentally change structural inequality. In the future, Germany needs to find a new balance between "efficiency" and "equity".

Equity in Process: The cooperation between enterprises and schools ensures that the teaching content is aligned with market demand, and students receive high-quality vocational skills training. In addition, the German government's funding for vocational education reduces the economic burden on students. Germany's dual-system has both institutional advantages and structural contradictions in process equity. Its experience shows that vocational education equity cannot rely solely on market regulation, but requires the coordination of the government, enterprises and schools, especially focusing on the systematic barriers faced by vulnerable groups. In the future, digitalization may provide new possibilities for narrowing the resource gap.

Equity in Outcomes: The employment rate of dual-system graduates is as high as over 90%, which significantly improves the career opportunities of groups with lower socio-economic status. Germany's dual-system has performed excellently in reducing youth unemployment and providing stable incomes, but family background, gender and immigration status still affect long-term career development. To

achieve true equity in outcomes, it is necessary to further: reduce the restrictions of social classes on career choices; increase the participation of vulnerable groups in high-paying industries; optimize early education tracking to avoid determining students' destinies too early. The successful experience of the dual-system is worth learning from, but its equity challenges also remind us that there is no perfect education system, only constantly optimized policies.

Germany's undergraduate vocational education, also known as the "dual-system" vocational education, is a vocational education model that closely combines schools with enterprises and theory with practice. This educational model originated in the mid-20th century and has provided a large number of excellent skilled talents for Germany's economic take-off and industrial development. This vocational education model emphasizes the close integration of theory and practice, and focuses on the cultivation of vocational competence and the mastery of practical skills. In terms of teaching content, it pays attention to the unification of theoretical teaching and practical teaching, enabling students to apply the theoretical knowledge they have learned in practice and continuously deepen their understanding of theoretical knowledge in practice. In addition, the teaching content also focuses on the integration of interdisciplinary knowledge to cultivate students' comprehensive quality and adaptability.

However, the dual-system also faces equity challenges. Firstly, students are tracked into vocational education or academic education in middle school (around the age of 10-12). This early tracking may limit students' future choices, especially in terms of academic further study. Secondly, training places in high-quality enterprises are often concentrated in economically developed regions, leading to unequal educational resources between regions.

Fundamentally speaking, vocational education and general education in Germany are two equally important types of education. They provide fundamental guidance for deepening the reform of vocational education and promoting its high-quality and comprehensive development. In the current context of implementing the "20 Guidelines for Vocational Education" and comprehensively deepening the reform of the modern vocational education system, clarifying the framework of China's vocational education system and promoting the pilot reform of undergraduate vocational education play an important role in establishing a modern vocational education system and promoting the modernization of vocational education.

3.1.2. The United States: Diversified Education

The undergraduate vocational education in the United States is a diversified system covering various professional fields. In the United States, vocational and technical education has always played an important role in providing high-quality talents for the labor market.

Equity of Access: For diversified entry and opportunity expansion, the undergradu-

ate vocational education in the United States has effectively expanded the equity of educational access through diversified admission mechanisms. Open Admission Policy: Community colleges generally implement open admission. Regardless of academic background, students can apply for associate degree programs, providing a college entrance channel for students with weak academic foundations or non-traditional students. Credit Articulation Mechanism: Improved state-level articulation agreements ensure that credits from community colleges can be smoothly transferred to four-year universities, reducing transfer barriers.

Equity in Process: Reflected in personalized paths and resource guarantee, the United States supports students' diversified development needs through flexible educational process design. Firstly, diversified teaching forms, such as the applied university model: for example, the College of Applied Engineering at Michigan State University integrates theoretical teaching with project practice. Online Blended Learning: The online Bachelor of Information Technology program at Arizona State University provides flexible study time and an adaptive learning platform. Enterprise Cooperative Education: Northeastern University's "Cooperative Education Program" incorporates paid internships into the credit system. Finally, the support service system: Academic Support Centers: Provide targeted services such as math tutoring and writing guidance. Career Navigation Systems: Personalized career planning and employment services.

Equity in Outcomes: Value recognition and sustainable development make the undergraduate vocational education in the United States achieve remarkable results in terms of outcome equity. From the perspective of improved employment quality, data shows that the starting salary of bachelor's graduates in engineering and technology is higher than that of some academic majors, and the mid-term salary gap continues to widen. Smooth Further Education Channels: Associate degree graduates from community colleges can be admitted to research universities to achieve vertical mobility.

The diversified practices of undergraduate vocational education in the United States have formed a relatively perfect equity guarantee mechanism in the three dimensions of access, process and outcomes through open entry, personalized paths and outcome certification. In the initial stage of exploration, China's undergraduate vocational education should systematically construct a diversified college entrance channel, a flexible training model and a quality certification system in line with national conditions, so that vocational education can truly become a fair engine for promoting social vertical mobility.

3.2. China: Rapid Development and Equity Challenges of Higher Vocational Undergraduate Education

China's higher vocational undergraduate education started in the early 21st century and has developed rapidly in recent years under the promotion of policies. The "in-

tegration of production and education - competition - innovation and entrepreneurship" model mentioned in the Journal of Hubei Open Vocational College reflects China's efforts in cultivating applied talents in higher vocational undergraduate education. However, the problem of educational equity is still prominent:

Equity of Access: Through independent enrollment and college entrance examination expansion, higher vocational undergraduate education has provided more students with opportunities to receive higher education. The Ministry of Education announced in 2024 that the national enrollment scale of higher vocational undergraduate education has reached 200,000. However, high-quality higher vocational undergraduate colleges are mostly concentrated in economically developed regions, and students from rural and underdeveloped areas have fewer opportunities for admission. The rapid development of China's higher vocational undergraduate education has provided an upward channel for skilled talents, but the equity of access is restricted by social concepts, resource allocation and policy implementation. In the future, it is necessary to shift from "scale expansion" to "quality balance", narrowing the gap between urban and rural colleges and regional colleges; reform the enrollment system to truly realize the selection standard of "skills first"; construct an equivalent recognition mechanism between vocational education and general education to break academic discrimination. The equity problem of higher vocational undergraduate education is essentially a reflection of social stratification in the field of education. Only through systematic reform can it become an engine for promoting social mobility rather than a tool for solidifying classes.

Equity in Process: The curriculum setting of higher vocational undergraduate education is closely combined with industrial demand, but there are regional differences in terms of teachers' strength and training facilities. For example, higher vocational colleges in the eastern coastal areas often have more enterprise cooperation resources, while those in the central and western regions are relatively lacking. The rapid development of China's higher vocational undergraduate education has provided a new path for skilled talents, but process equity is still restricted by regional differences, resource allocation and social prejudices. In the future, it is necessary to truly realize the fair vision of vocational education of "different types, equal status" through policy-mandated balanced resources, deepened integration of production and education, and reconstructed evaluation systems.

Equity in Outcomes: The employment rate of graduates from higher vocational undergraduate education is relatively high, but their social recognition is lower than that of general undergraduate education. Some graduates face unfair treatment in terms of career promotion and salary.

The rapid development of China's higher vocational undergraduate education has provided an upward channel for skilled talents, but the realization of outcome equity needs to break through three major bottlenecks: breaking the "academic-only" culture and reconstructing society's recognition of the value of skills; bridging re-

gional and inter-school gaps to prevent the Matthew effect of vocational education resources; opening up the closed loop of "skills - academic qualifications - career development" to avoid higher vocational undergraduate education becoming "ceiling education". The key in the future is not only to expand enrollment, but also to make higher vocational undergraduate education truly a "choice to change destiny" rather than a "second-best option" through institutional design (such as equal employment policies) and quality revolution (such as real integration of production and education). In addition, the rapid development of China's higher vocational undergraduate education has also brought new equity problems. For example, some colleges and universities ignore teaching quality in pursuit of scale expansion, resulting in uneven skill levels of students; at the same time, the gap between urban and rural educational resources and differences in family economic conditions have further exacerbated educational inequality.

4.1. Main Challenges and Cause Analysis

Combined with international comparisons, China's educational equity problems are particularly complex in the field of higher vocational undergraduate education. The following are the main challenges and their cause analysis:

4.1.1. Unbalanced Regional Development

China's eastern coastal areas are economically developed with abundant vocational education resources, while the central and western regions are lacking in resources. This regional difference leads to uneven access to higher vocational undergraduate education and teaching quality. For example, higher vocational colleges in Guangdong, Zhejiang and other places have close cooperation with enterprises, and students can obtain high-quality training opportunities, while colleges in inland provinces are limited by funds and enterprise support.

4.1.2. Low Social Recognition

Although higher vocational undergraduate education aims to cultivate applied talents, social prejudices against vocational education still exist. Many parents and students regard higher vocational undergraduate education as a "second-class choice", which not only affects students' self-confidence, but also limits their career development.

4.1.3. Uneven Allocation of Resources

High-quality teachers and training facilities are mostly concentrated in a few top colleges and universities, resulting in students from ordinary higher vocational colleges obtaining fewer resources in the educational process. This inequality directly affects teaching quality and students' skill training.

4.1.4. Imperfect Evaluation Mechanism

As stated in the Journal of Hubei Open Vocational College, a scientific evaluation mechanism is crucial to educational quality. However, the current evaluation system of China's higher vocational undergraduate education is mostly employment rate-oriented, ignoring students' all-round development and long-term career competitiveness, making it difficult to effectively guarantee outcome equity.

4.2. Policy Suggestions and Enlightenment

To improve the educational equity of China's higher vocational undergraduate education, combined with international experience and domestic reality, this paper puts forward the following policy suggestions:

4.2.1. Optimize Resource Allocation and Promote Regional Equity

Increase Investment in the Central and Western Regions:The government should support the teacher training, training base construction and curriculum development of higher vocational colleges in the central and western regions through special funds to narrow the regional gap.

Establish a Resource Sharing Mechanism:Promote joint school-running between high-quality higher vocational colleges and colleges in underdeveloped areas, and share curriculum resources, teachers and enterprise cooperation networks. For example, we can learn from Australia's TAFE online education platform to develop a national curriculum resource database for higher vocational undergraduate education.

4.2.2. Enhance Social Recognition and Strengthen Equity of Access

Strengthen Publicity and Guidance: Change the public's prejudice against higher vocational undergraduate education through media publicity and career planning education, and highlight its unique value in cultivating high-skilled talents.

Improve the Credit Recognition Mechanism: Learn from Australia's TAFE experience to establish a credit recognition and transfer channel between higher vocational undergraduate education and general undergraduate education, provide students with more choices, and enhance the attractiveness of higher vocational undergraduate education.

4.2.3. Improve the Evaluation Mechanism and Ensure Equity in Process and Outcomes

Construct a Diversified Evaluation System: Refer to the "integration of production and education - competition - innovation and entrepreneurship" model mentioned in the Journal of Hubei Open Vocational College, and develop a comprehensive evaluation system covering academic ability, vocational skills and innovation ability. For example, skill certifications and competition results involving enterprise participation can be introduced as evaluation indicators.

Establish a Feedback Mechanism: Regularly collect feedback from students, teachers

and enterprises, and timely adjust the curriculum setting and teaching methods to ensure the fairness and effectiveness of the educational process.

5. Summary

Educational equity is one of the core goals of the development of higher vocational education. By comparing the practices of higher vocational undergraduate education in Germany, the United States and China, it can be found that all countries have achieved remarkable results in their efforts to achieve equity in access, process and outcomes, but they also face challenges such as regional differences, social prejudices and uneven resource allocation. While developing rapidly, China's higher vocational undergraduate education should gradually realize the goal of educational equity through measures such as optimizing resource allocation, enhancing social recognition, improving evaluation mechanisms and deepening the integration of production and education. The "integration of production and education - competition - innovation and entrepreneurship" model proposed in the Journal of Hubei Open Vocational College provides an important enlightenment for the development of China's higher vocational undergraduate education, that is, to improve educational quality through scientific evaluation and feedback mechanisms, thereby promoting equity. In the future, China should explore a development path of higher vocational undergraduate education suitable for its own national conditions on the basis of learning from international experience, and contribute to building a fair and high-quality vocational education system.

References

[1] "Implementation Plan for the Action to Empower and Improve the Integration of Production and Education in Vocational Education (2023-2025)" [J]. Vocational and Technical Education, 2024, 45(3): 66-67.

[2] Ma Yucheng, Rao Yujie, Xu Shijian. International Comparison and Enlightenment of the Development of Policies for the Integration of Production and Education in Vocational Education——Taking Germany, the United Kingdom and Japan as Examples [J]. Journal of Chengdu Aeronautic Polytechnic, 2024, 40(1).

[3] Yu Chuanling. Characteristics of Germany's Dual-System University Education Model and Its Enlightenment to the Transformation of Local Undergraduate Universities in China [J]. Vocational Education Research, 2018 (11): 88-92.

[4] He Yanfang. Why Are They Willing to Engage in Skilled Work?——A Study on German Youth's Willingness to Invest in Skills from the Perspective of Institutional Theory [J]. Journal of East China Normal University (Educational Sciences Edition), 2024, 42(4): 63-75.

[5] Xue Zhengbin, Hong Ming. Experience and Enlightenment of Industry-University-Research Cooperative Education in American Community Colleges [J]. Education and Culture Forum, 2024, 16(2): 19-26.

[6] Shi Xiaotian. Analysis of Industry-University Cooperation Education Policies in Higher Vocational Education in the UK, the US and Australia and Their Reference to China——From the Perspective of Public Policy [J]. Contemporary Theory and Practice of Education, 2009, 1(6): 1-4.

[7] van Geet, M.T. et al. The Importance of Policy Design Fit for Effectiveness: A Qualitative

Comparative Analysis of Policy Integration in Regional Transport Planning [J]. Policy Sciences, 2021, 54: 629-662.

[8] Wu Futai. Community Colleges: A Model of American Vocational Education [J]. Jiangxi Education, 2022 (28): 47-49.

[9] Sun Fengmin, Shao Jiandong, Xu Zhenzhen. The Formation Mechanism and Impact Effect of Germany's "Dual-System" Vocational Education Model——Also on the Exploration and Trend of China's Vocational Education Model [J]. Vocational and Technical Education, 2023 (9).

[10] Lin Yining, Huang Xiaozhao, Zhang Jun. Characteristics, Dilemmas and Outlet of Higher Vocational Students' Education Management under the Background of Integration of Production and Education [J]. Education and Vocation, 2021 (10).

[11] Gong Rong. Thoughts on the Development of Professional Quality Assurance System in Higher Vocational Education [J]. Journal of Hubei Open Vocational College, 2024, 37(1).