

Research on the Difficulties and Countermeasures of Building a Vocational Education Credit Bank under the National Qualifications Framework

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ABSTRACT

With the acceleration of the popularization, standardization, lifelong learning, and internationalization of vocational education, improving the national qualifications framework and building a vocational education credit bank have become an inevitable trend of the times. Currently, the construction of China's credit bank faces several challenges, including difficulties in system formulation, unifying standards, integrating certificates and diplomas, converting credits, and achieving effective management. Therefore, it is necessary to actively build an overall institutional framework for the credit bank, unify the existing regional standards for recognizing learning outcomes, adopt multiple measures to promote the connection and integration of certificates and diplomas, construct an "overpass" for talent training across different types of education, and create a credit bank management system that is both flexible and stable.

KEYWORDS

Vocational education; National qualifications framework; Credit bank; Standards; Integration of certificates and diplomas

1 Introduction

As early as 2016, the national "13th Five-Year Plan" proposed the establishment of personal learning accounts and a credit accumulation system, smoothing the channels for continuing education and lifelong learning, formulating a national qualifications framework, and promoting the conversion and mutual recognition of non-academic education learning outcomes and vocational skill level credits. In 2019, the State Council issued the *National Vocational Education Reform Implementation Plan*, which clearly required accelerating the construction of a national credit bank for vocational education and formulating a national qualifications framework suitable for China's national conditions. It is evident that the construction of the national qualifications framework and the vocational education credit bank has become a strategic task for the modernization of China's vocational education in the new era. Compared with developed countries, China's credit bank construction started late and has a weak foundation, facing a series of difficulties in the process. Based on this, this article intends to clarify the difficulties in building a vocational education credit bank and explore corresponding solutions on the basis of defining the significance of its construction.

2 Difficulties in Building a Vocational Education Credit Bank under the National Qualifications Framework

2.1 Difficulty in Institutional Construction

The National Qualifications Framework and the credit bank are innovations that concern the foundation of the national education system. Building a credit bank based on the National Qualifications Framework requires a scientific, rigorous, and holistic top-level design, as well as systematic institutional construction from the top down. Although some provinces and cities have successively launched explorations into credit bank construction on varying scales, there is still a lack of systematic legal protection and institutional support at the national level.

First, the construction of a credit bank lacks a legal basis. The primary law governing vocational education in China is the *Vocational Education Law of the People's Republic of China*, enacted in 1996, which does not address credit bank construction. In 2019, the Ministry of Education issued the *Revised Draft of the Vocational Education Law of the People's Republic of China (Draft for Comment)*, which explicitly stipulates that China should establish a national qualifications framework system and a vocational education credit bank. However, this remains a general statement without any specific operational rules or institutional provisions.

Second, supporting systems for the credit bank are missing. The National Qualifications Framework is an institutional framework covering all types and levels of education, while the credit bank based on this framework serves as a "hub" connecting various learning outcomes. Promoting the construction of a vocational education credit bank must proceed in tandem with the development of a series of supporting systems, such as funding investment and guarantee systems, systems for integrating academic and non-academic education, systems for recognizing informal learning outcomes, and quality assurance systems for credit bank construction.

2.2 Difficulty in Unifying Standards

The construction of a vocational education credit bank based on the National Qualifications Framework aims to build a nationwide credit bank encompassing all formal and informal learning outcomes. Unifying standards involves both harmonizing regional standards for recognizing learning outcomes and standardizing the criteria for various types of learning achievements.

First, regarding the unification of regional standards for recognizing learning outcomes, there is a lack of consensus and basis for building a nationally unified credit recognition standard. Since 2012, led by Shanghai, some provinces and cities in eastern China have successively explored regional credit bank construction, accumulating valuable experience and forming some local credit recognition standards. However, because each region plans its credit bank based entirely on local socioeconomic development needs and educational conditions, there is a lack of coordination between them. The credit recognition standards established by different regions vary significantly, and in some cases, the differences are substantial. Currently, building a national-level credit bank in China inevitably requires unifying these diverse local standards. However, using any single region's standard as the basis is likely to cause discomfort among other local education departments. At the same time, due to the large disparities in economic, social, and educational development levels between regions in China, and the obvious gap in educational resources accessible to the public in different areas, whether establishing a unified national credit recognition standard hinders educational equity remains a highly controversial issue.

Second, regarding the unification of standards for various types of learning outcomes, there are scientific and rationality challenges in building unified credit recognition standards. A vocational education credit bank must not only connect learning outcomes from vocational academic education and vocational training but also bridge those from general school education and vocational school education. While it is relatively easy to unify standards within the vocational education and training system, it is much harder to harmonize standards across different education types. In particular, general education and vocational education cultivate different types of talents, with vastly different educational content and focuses. Ensuring the scientificity and rationality of unified learning outcome recognition standards remains an important unresolved issue.

2.3 Difficulty in Integrating Certificates and Diplomas

The integration of certificates and diplomas is a crucial link in building a vocational education credit bank and a necessary step in implementing the 1+X certificate system. Achieving this integration is conducive to unifying various learning outcomes within the vocational education system and consolidating the institutional foundation for credit bank construction. However, the implementation of China's 1+X certificate system is still in the pilot stage, and the integration of certificates and diplomas faces many practical difficulties.

First, there is a lack of accumulated practical experience in integrating certificates and diplomas, and full connection will take time. Although the integration of certificates and diplomas has been under consideration in China's vocational education top-level design for a long time, its actual implementation began in 2019, marked by the issuance of the *National Vocational Education Reform Implementation Plan*, which placed the practice of certificate-diploma integration under the 1+X certificate system on the agenda. Currently, the pilot work of China's 1+X certificate system is progressing gradually, and the integration of certificates and diplomas is moving from policy advocacy to educational reality. It is still in the exploratory stage in terms of system construction, operational mechanisms, and management models. There is neither replicable and promotable experience nor mature institutional mechanisms. Therefore, achieving full connection between vocational education academic certificates and vocational skill level certificates will take time. Because certificate-diploma integration is difficult to achieve quickly, it becomes even more challenging for vocational education credit bank construction to unify the recognition of learning outcomes from both vocational academic education and vocational training.

Second, the model for integrating certificates and diplomas is immature. The integration of academic certificates and vocational skill level certificates is essentially the integration of vocational school education and vocational training. In the current talent training process of vocational schools, there are mainly two models for this integration: one is the full integration of professional teaching and vocational training, and the other is the partial integration of professional teaching and vocational training. The former requires systematic planning, design, and reconstruction of professional talent training programs and curriculum systems to include vocational training; the latter involves linking part of the professional courses and teaching content with vocational training while maintaining the relative independence of the training. However, both models have certain flaws. The model of full integration has poor adaptability and struggles to meet the vocational education needs of social students. The model of partial integration has strong adaptability but lacks systematicness, making it unsuitable for vocational school students receiving systematic education. Choosing the appropriate integration model has become a practical dilemma for many vocational schools implementing certificate-

diploma integration.

3 Countermeasures for Building a Vocational Education Credit Bank under the National Qualifications Framework

3.1 Strengthen Top-Level Design and Build an Overall Institutional Framework for the Credit Bank

Drawing on the practical experience of developed countries in credit bank construction, top-level design is crucial. It serves as both a prerequisite for the smooth implementation of credit bank-related work and a guarantee for the expected application effects of all subsequent learning outcomes. At this stage, China must strengthen top-level design and accelerate the construction of an overall institutional framework for the vocational education credit bank.

First, accelerate the improvement of laws and regulations related to the credit bank. The lack of legal norms is a prominent problem in the current construction of China's vocational education credit bank. Against the backdrop of the continuous advancement of the rule of law in all respects, China should improve relevant laws and regulations as soon as possible. On the one hand, China should speed up the revision of the *Vocational Education Law of the People's Republic of China*, promptly conclude the solicitation of opinions and deliberation, and promote the early implementation of higher-level laws and regulations for the national qualifications framework and credit bank construction. On the other hand, based on the completion of the revision of the *Vocational Education Law of the People's Republic of China*, China should launch special legislation related to the national qualifications framework and credit bank construction at an early date. This legislation should make legal provisions on the structure, hierarchy, and standards of the national qualifications framework, and clarify the positioning, objectives, and detailed rules for credit recognition, conversion, and accumulation of the credit bank from a legal perspective.

Second, strengthen policy supply related to the credit bank. Currently, the construction of China's national qualifications framework and vocational education credit bank exists only in fragmentary form in national policy documents, making it difficult to form constraints and guidance for the specific practical work of various regions and departments. Strengthening top-level design and enhancing policy supply are indispensable links. The State Council and the Ministry of Education should promptly sort out and summarize existing local experience and achievements in credit bank construction, form a more comprehensive and systematic guiding ideology, institutional arrangements, and implementation measures for credit bank construction, and issue special policies on the national qualifications framework and credit bank construction at an early date to strengthen support, regulation, and guidance for credit bank construction work.

Finally, improve the supporting systems related to the credit bank. The effective operation of the credit bank is inseparable from the assistance and support of many supporting systems. While building the national qualifications framework and the credit bank, the State Council and the Ministry of Education need to simultaneously promote the construction of relevant supporting systems. First, it is necessary to accelerate the improvement of the citizen lifelong learning system. Referring to foreign *Lifelong Learning Laws*, a suitable legal framework for citizen lifelong learning should be established to clarify citizens' right to lifelong learning and the support that society should provide. Second, it is necessary to improve the funding investment and guarantee system for credit bank construction, establish a funding guarantee mechanism dominated by central coordination, supplemented by local investment, and with active participation of schools and enterprises, to consolidate the material foundation for credit bank construction. Third, it is necessary to accelerate the improvement of the communication and integration system between formal and non-formal education, and between formal and informal learning. Guided by a broad view of vocational education, the coverage of the vocational education system should be expanded to bring non-formal education and informal learning, which were previously marginalized, into the current education system.

3.2 Establish Authoritative Standards and Unify Existing Regional Standards for Recognizing Learning Outcomes

Both the national qualifications framework and the credit bank are standard-based institutional systems. Under the realistic condition that the relevant standards for China's national qualifications framework and credit bank are not perfect, the Ministry of Education should further strengthen investigation and research and establish national qualifications framework standards and standards for credit recognition, accumulation, and conversion as soon as possible.

In terms of building national qualifications framework standards, reference can be made to the structure and standards of qualifications frameworks in developed countries and regions. Based on China's talent evaluation systems such as the professional title series and level system, academic degree hierarchy system, and vocational skill level system, a national

qualifications framework model with horizontal classification, vertical stratification, and mutual connection should be established. Talent evaluation levels should be in one-to-one correspondence with talent competency levels, and a multi-level standard system should be established to serve as the standard reference for credit bank construction.

In terms of building standards for the vocational education credit bank: first, it is necessary to unify existing regional standards for recognizing learning outcomes. At this stage, in regions where regional credit banks have been established, the standards for credit recognition, accumulation, and conversion are varied, with both similarities and contradictions. The Ministry of Education should collect existing learning outcome recognition standards from various regions, analyze the scientificity and effectiveness of current local standards based on the inherent characteristics and formation laws of various types of education and learning outcomes. On the basis of fully soliciting opinions from local education departments, vocational schools, and industry enterprises and reaching a consensus, valuable standards in local learning outcome recognition standards should be retained, unscientific and low-application-value standards should be removed, missing standards should be supplemented, and conflicting standards should be adjusted and optimized to establish a relatively unified national-level learning outcome recognition standard system.

3.3 Deepen Educational Reform and Adopt Multiple Measures to Promote the Connection and Integration of Certificates and Diplomas

The essence of integrating certificates and diplomas is the integration of vocational academic education and vocational skills training. Based on the actual development of vocational education, focusing on promoting school-enterprise "dual-system" talent training, it is necessary to improve the mechanism for integrating certificates and diplomas and deepen the reform of the vocational education talent training system.

First, accelerate the promotion of the "Three Education Reforms" and improve the mechanism for integrating certificates and diplomas. Vocational schools should strengthen the "Three Education Reforms" (reforms of teachers, teaching materials, and teaching methods), using them as entry points to drive the integration of vocational academic education and vocational skills training, and form a technical and skilled talent training mechanism that integrates certificates and diplomas. As long as the integration of academic education and vocational training is realized at the talent training level, the integration of "certificates" and "diplomas" will follow naturally. In terms of specific measures, vocational colleges should "empower" teachers, strengthen in-service teacher training, increase the introduction of high-level talents, reform teacher assessment and evaluation mechanisms, encourage teachers to improve their professional abilities and comprehensive literacy, and build a high-quality and sufficient contingent of "double-qualified" teachers. Vocational colleges should also deepen the reform of teaching materials, abandon the closed-door model of compiling and selecting textbooks, strengthen contact with enterprise technical experts and senior managers, jointly develop and compile textbooks that conform to production reality and the latest industry trends with enterprises, and timely incorporate new technologies, new processes, new procedures, and new specifications from the enterprise production and operation process into curriculum teaching content and teaching standards. Second, establish a modular talent training system to enhance the applicability of the certificate-diploma integration model. The main reason why the current certificate-diploma integration model in China's vocational education has low applicability is that the technical and skilled talent training system is too systematic and the transferability of the professional knowledge and skills training process is too poor. Under existing conditions, establishing a modular talent training system can effectively enhance the applicability of the certificate-diploma integration model.

3.4 Break Down Educational Barriers and Construct an "Overpass" for Talent Training Across Different Education Types

Currently, barriers between different education types in China mainly exist between general education and vocational education, and between non-formal education and formal education. Therefore, constructing an "overpass" for talent training across different education types should also proceed from these two aspects.

First, improve mechanism construction to promote the integrated development of general and vocational education. In the past, China has always implemented a strategy of classified development of general education and vocational education, with little intersection between the two types. In the new era, building a vocational education credit bank led by the national qualifications framework requires reversing past educational development concepts, viewing and promoting the development of vocational and general education with an integrated construction mindset, and facilitating their connection and integration. It is necessary to effectively raise the status of vocational education in the national education system. By improving the salary and treatment levels of technical and skilled talents, establishing a vocational education college entrance examination system, and increasing the intensity of "scholarships, grants, loans, and subsidies" for vocational education students, the social attractiveness of vocational education can be enhanced,

guiding some general education students to flow into vocational education. It is necessary to strengthen the integrated training mechanism between general and vocational education. By setting up intermediate supplementary courses that connect both types of education, favorable conditions can be provided for students to switch education types. A national certificate mutual recognition system connecting general and vocational education should be established to realize the integrated mutual recognition of academic certificates, degree certificates, and skill level certificates at all levels between the two types of education.

Second, accelerate institutional innovation to promote the integrated development of formal and non-formal education. In the past, non-formal education has always been in a marginal position in China's national education system. However, in the context of vigorously promoting the construction of the national qualifications framework and the credit bank, non-formal education, as an important manifestation of lifelong education, deserves a higher status and should play a greater role. First, the state should increase support for the development of non-formal education, strengthen policy supply, increase funding, formulate measures and methods to promote the high-quality development of various types of non-formal education, and guide the public to receive diverse non-formal education through various channels. Second, the Ministry of Education should make overall plans for the development of formal and non-formal education. In accordance with the requirements of integrated development, and with formal education as a reference, it should promote the systematization of various forms of non-formal education.

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