

Research and Practice on School Credit Bank System of Financial Management Major in Higher Vocational Colleges in the Era of Big Data

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Abstract: Great changes have taken place in the way of obtaining, processing and analyzing financial information in the era of big data. The types of information are more diversified and the quantity is more and more huge, which increases the difficulty of financial management, and enterprises put forward higher requirements for financial management professionals. SCB (school credit bank) is a model or system that imitates the practice of ordinary banks to store money and transplant it to learning achievement management accordingly. This topic will take the financial management major as an example to study the SCB system, and form a new talent training scheme for financial management major, which covers the skills and knowledge requirements of professional (post) standards and is in line with professional qualification certificates. Taking the research and practice of SCB system of financial management major as a pilot, this paper explores the reform and innovation of learning management system and teaching mode of HVC(Higher Vocational Colleges) financial major, and promotes the reform and innovation of higher vocational education.

1. Introduction

The training of financial management professionals is bound by traditional teaching concepts, the design of curriculum system is irrational, and teachers' information literacy is low [1]. In the era of big data, universities should clearly recognize the basic qualities that financial management professionals should have, implement targeted teaching reforms, strengthen school-enterprise cooperation, optimize the design of curriculum system and teaching content, increase the proportion of practical courses, and promote the organic combination of theory and practice of students, so that students can make full use of big data technology to carry out financial management and truly realize the training of financial management professionals.

As students majoring in financial management in HVC(Higher Vocational Colleges), they should highlight the cultivation of students' professional ability, and the only criterion for testing students' ability is the assessment requirements of the enterprise industry for their work ability [2]. The research purpose of this project is to fully explore students' participation enthusiasm through SCB(school credit bank) system. We encourage and guide students to study after class, and give

students some credits that are not included in the teaching plan through the assessment of extracurricular activities. Encourage students to participate in provincial and national competitions in exchange for corresponding credits, and more importantly, by guiding students to obtain corresponding industry certificates in exchange for corresponding course credits, students can graduate only by completing corresponding credits.

2. Overview of SCB system

SCB system is a system. "The system in the field of higher education refers to the behavior rules, norms or stable customs and ideologies that solve the trading relationship between people within the higher education system. It is an institutional arrangement that the system is expressed in a certain structure, way or framework. " [3-4]. From the content of SCB system, there are broad sense and narrow sense: broad sense is the arrangement of flexible learning and education system, including flexible and open admission system, conversion system, credit system, tutorial system, academic system and evaluation system, among which credit system and conversion system are the main symbols; In a narrow sense, it refers to the credit accumulation and conversion information system or even just the student status management system.

The SCB system designed by the author in this paper includes four main elements: SCB system, course selection system, exchange system and evaluation Committee. Each component operates in coordination with the deposit and exchange mechanism [5]. Although the SCB system does not have the credit function of modern banks, it manages credits in a similar way by borrowing the bank's business methods such as lump-sum deposit and withdrawal and currency exchange, so as to further optimize the credit system.

As far as SCB system is concerned, it is essentially a system of authentication, accumulation and transformation of learners' learning achievements based on the credit system. Its purpose is to maximize the openness of the teaching system in time and space, and at the same time promote individual lifelong learning, so as to build a learning society in which everyone can enjoy the right to lifelong education. Specifically, SCB is a model or system that imitates the practice of storing coins in ordinary banks and is transplanted to learning achievement management accordingly. Its basic function is the process of identifying, accumulating and transforming the learning achievements (credits) obtained by learners through formal, informal or even informal channels. Finally, according to the corresponding rules, we can determine what kind of study certificate to grant [6-7]. Therefore, in essence, it is also a management mode to identify learning achievements.

3. The current situation of SCB system construction

3.1. The orientation of SCB system is vague

Under the guidance of SCB system, learners can authenticate, accumulate and exchange all kinds of learning achievements they have or need in the future, so as to promote learners' lifelong growth. At present, the concept of lifelong education and educational equity is integrated into the construction of SCB in China, but there are still unclear and incomplete problems in how to realize the responsibility subject of its concept [8]. For example, in the study-oriented countryside and community education, the construction of SCB is the propeller and catalyst for establishing the study-oriented countryside and lifelong education community. The orientation of SCB system is vague, and its current application in HVC education is mainly promoted by government pressure, which makes it impossible for school-running institutions to really participate. In the long run, the positive role of SCB system in HVC teaching will be restricted.

3.2. Difficulties in mutual recognition and exchange of credits

Credit recognition is the recognition of learners' previous learning experience, which mainly includes two aspects: on the one hand, the conversion and recognition of course credits; On the other hand, it is the conversion and identification of certificate credits. Credit recognition needs a huge recognition standard as a basic principle to convert and recognize course credits or certificate credits. The key to the smooth implementation of SCB lies in the establishment of standards such as curriculum setting, curriculum credit standards and exchange recognition. However, the current HVC professional setting is not standardized enough, and there is no unified standard for the self-proclaimed system of curriculum setting, teaching materials, teaching contents and teaching plans among institutions, which makes it difficult to authenticate, transform and store credits.

3.3. The credit system is not perfect

The implementation of SCB system is an important way to deepen the reform of HVC teaching management system, which will have a great impact on the whole higher education management system and the operation mode of schools in China. In SCB system, each HVC has its own SCB. When new students enter school, SCB will open a new credit account to store the credits obtained and the information about their school status [9]. Each student is only allowed to have one credit account. The financial management major in our school uses the academic year credit system instead of the complete credit system, which leads to students' lack of freedom in course selection, and the study still needs to be carried out according to the semester, which cannot give full play to the role of SCB.

3.4. Lack of software and hardware facilities and venues for practical teaching in schools

In today's world, the role of new technologies in promoting social development is increasingly apparent. Modern information technologies such as the Internet, big data, cloud computing and artificial intelligence are changing with each passing day, which promotes the economic and social development at a faster speed. The development of governance technology in higher vocational education requires more scientific and reasonable management of learners' learning achievements in higher vocational education.

At present, there is only one training room for financial management major in our school, which lacks training software for professional teaching, and the training facilities and venues in the school are insufficient. The training teaching conditions are an important guarantee for implementing the 1+X certificate system, which in turn affects the transformation of X certificate learning results. Financial management major needs to be equipped with at least two professional training rooms and related training teaching software.

4. The SCB system practice path of HVC financial management specialty in the Big data era

4.1. Innovative training scheme for financial management professionals

The informatization construction of financial management is to change the management mode with the help of information technology and form a more complete financial management system. In the era of big data, it is very important to change the concept of financial management, and the current financial industry is still an important pillar of national economic development. Therefore, it is necessary to better change the functions of financial enterprises, and at the same time, to meet the needs of social development, and to carry out specific countermeasures in combination with the

current differences in financial management mechanism and market economy environment, so as to realize the integration of financial enterprises.

In order to ensure the smooth realization of the training goal of financial management professionals, it is necessary to clarify the training goal, not only to let students know what the daily work of financial management positions contains, but also to cultivate students' rigorous work style and enhance their sense of responsibility. Teachers use modern teaching methods to create professional scenes and guide students to use Big data technology to obtain, process, analyze and use financial information. And they also organize a team of teachers to develop a talent cultivation plan that is compatible with the SCB system, reduce required credits and class time appropriately, and increase elective credits and extracurricular time to meet the needs of students' self-learning and personalized development.

4.2. Optimize the curriculum system of financial management specialty

Although the spontaneous exploration mode of SCB system construction in HVC education is conducive to mobilizing grass-roots forces to fully participate in the process of SCB system construction, due to the lack of the support of mandatory forces and mechanisms, it is impossible for different participants to form coordinated actions, and the rules and standards independently developed by them cannot be universal, and it is difficult to bridge differences, making it difficult to achieve universal SCB system construction.

In order to cope with the arrival of the era of big data, many HVCs have opened majors related to big data. The undergraduate major of big data approved by the Ministry of Education is called data science and big data technology. From the main courses offered, it mainly involves three disciplines: computer, mathematics and statistics. In the context of big data, enterprises and governments have higher requirements for financial workers, which not only require practitioners to have certain financial theoretical knowledge and statistical analysis methods, but also master the unique data analysis methods in the information age [10]. In teaching activities, in order to strengthen students' financial big data modeling ability, outside the classroom, we also guide students to actively participate in various financial simulation competitions, especially various quantitative trading competitions. Incorporating students' practical results into the final course performance evaluation and guiding students to participate in such competitions not only improves students' practical ability, but also improves students' teamwork ability, which is also the quality that students need in their future work.

According to the current situation of HVC financial management teaching, optimize the existing curriculum system and establish and improve the comprehensive and diversified evaluation mechanism for students; By introducing social forces, strengthening the cooperation between schools and enterprises, the practice teaching base of financial management specialty is established, and the teaching plan and curriculum standards are revised and improved according to market demand and enterprise reality; Actively carry out the reform of teaching content and curriculum system, and strengthen the construction of excellent courses.

4.3. Formulate credit recognition standards and management systems

Thirdly, banks should establish a sound supply chain system, improve the supply chain banking system, and improve the supply chain banking system [11]. Although the Chinese government has repeatedly emphasized the importance of "integration of science and education" in a series of policy documents, there are few positive answers given regarding the specific content of "scientific integration", and even the education regulatory authorities often have disagreements. If the above issues cannot be effectively addressed, it will cause greater difficulties for the research and

construction of SCB [12].

The main function of the SCB system is to store and trade credit. On this basis, this article has designed the overall structure of the SCB system (see Figure 1). According to the system of Standard Chartered Bank, students only need to submit their applications to Standard Chartered Bank, and Standard Chartered Bank will provide guidance on "business" for students. Students can also learn how their applications are processed through Standard Chartered Bank's information center. It can be said that the school-based system is a window for students.

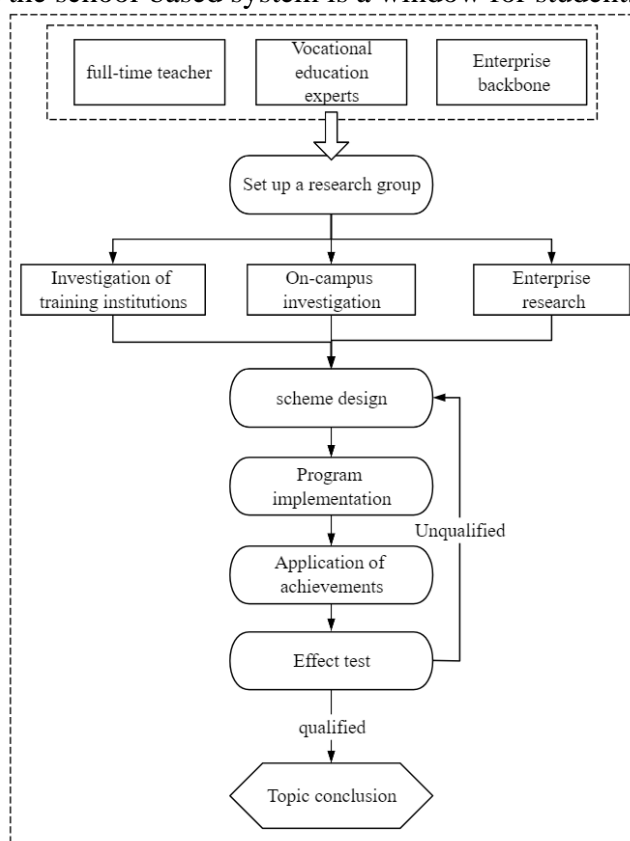


Figure 1: SCB system operation framework

In view of the divergence of credit certification standards in SCB system, we can build a national standard system and a unified quantitative standard for learning achievements. It is a systematic project to establish a national framework to unify the certification standards of learning achievements, which needs to be implemented in stages. The short-term goal is to promote credit exchange and mutual recognition of learning achievements between HVCs and enterprises directly connected with HVCs, while the long-term goal is to establish a unified national certification standard for learning achievements. So that every HVC student can receive personalized education flexibly. SCB of HVC education takes the "1+X certificate" system as an important starting point, and the core content of the "1+X certificate" system is to realize the mutual recognition of academic certificates and vocational skill level certificates. The mutual recognition of two different types of certificates needs to build authoritative conversion standards, which will involve the core elements of qualification framework such as certification and conversion standards and grades.

4.4. Optimize the construction of teachers in financial management specialty

In the era of intelligence, vocational education should change from the concept of "for career" to the concept of "through career" by means, so as to better adapt to the ever-changing human

resources market, improve key abilities, obtain career development and meet people-oriented demands. SCB is the foundation of realizing the concept of lifelong education and educational equity, and it is the constant "belief" of SCB. The organizational system of knowledge-intensive business service enterprises constructed under SCB is the framework of SCB, which can support SCB to play its main functions and promote its effective operation.

Strengthening the construction of teaching staff and improving the information literacy and teaching ability of teachers in financial management courses are conducive to promoting the training of financial management professionals to a new level. Schools should provide opportunities for teachers to practice in actual combat, let teachers study and further study in enterprises, complete the tasks of financial management positions, or invite financial management personnel of enterprises to carry out special training in schools to answer questions for teachers, improve their professional level and realize their all-round development. It is planned to hire off-campus personnel with solid professional basic theory and high practical level as part-time teachers, optimize the structure of teachers, improve the overall quality of teachers, and lay a good talent foundation for deepening the reform of SCB system.

5. Conclusions

The era of big data has created a favorable opportunity for enterprises to innovate and develop. The application of big data technology in financial management can be described as the general trend. It is imperative to train more outstanding financial management professionals to meet the actual needs of enterprises for relevant talents. At present, some problems have been exposed in the personnel training of financial management major, which has affected the effectiveness of personnel training. Therefore, under the background of HVC enrollment expansion, individualized teaching based on SCB system can allow students to learn flexibly according to their own conditions. This teaching method is beneficial for HVC to cultivate practical talents for docking enterprises. Information security, free course selection system, flexible credit accumulation system and flexible student registration system inevitably require a powerful information management platform to ensure the smooth implementation of diversified and personalized talent training models.

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