Exploration and Practice of Credit bank docking with Professional group construction——Taking the construction of Credit bank for Digital creativity and Media professional group as an example

Xia Sun¹,*

¹Shandong Institute of Commerce and Technology, Jinan, Shandong, China, 250103

Abstract. The National Credit bank for Vocational Education (Credit bank for short) is a unit of measurement based on credits. According to unified standards, it identifies and calculates various learning outcomes reflected in academic certificates and vocational skill level certificates. It has learning outcomes storage, accumulation and conversion and other functions of the learning incentive system and education management system.

1 INTRODUCTION

The Credit bank connects with the construction of professional groups, leads the process of teaching and learning with learning outcomes, and promotes educational equity and personal life-long development[1]. The academic assessment results of the professional group form the academic credits of the Credit bank, and the personal “Qualification framework” of the Credit bank guides the talent training direction of the professional group. The two complement each other and promote each other. The Credit bank serves the Digital creativity and Media professional group, which is not only the policy orientation and demand of the country and the government, but also an important way to improve the quality of education and promote the diversified development of students in vocational colleges Table 1. Setting Word’s margins.

In order to respect the individual differences of students, help students to establish self-confidence, tap their potential, expand students' interests and hobbies, break through the traditional limitations of learning time, space, content and majors, so that each student can learn from the original knowledge, ability and On the basis of quality, it has been fully and harmoniously developed, and the Digital creativity and Media professional group implements the Credit bank system on the basis of the school credit system. Open a Credit bank, set up reward credits, and carry out the deposit and exchange of reward credits.

2 Credit bank construction goals

2.1 Overall goal

Actively explore and practice the educational practice of Credit bank serving Digital creativity and Media professional groups, and provide students with more flexible learning channels, high-quality learning resources, and a complete Credit bank standard system through the Credit bank, which is convenient for students to carry out personalized learning and various types of learning. The certification, accumulation and conversion of achievements can enhance students' learning motivation and improve their learning quality.

2.2 Specific goals

2.2.1 Optimizing the learning outcomes framework.

The Digital creativity and Media professional group of Shandong Commercial Vocational and Technical College includes three majors: digital media art design, integrated media technology and operation, and virtual reality technology application. Give full play to the advantages of each major, redefine the learning outcome system, and divide the learning outcomes into different types, not only the public basic courses and professional courses of academic education, but also the school-enterprise cooperation project courses, labor education courses, professional quality courses, etc.; including Skills competitions, social projects, events, etc. Completed 1 set of Credit bank training system for Digital creativity and Media professional group.
2.2.2 Establish a teaching resource system.

There are many teaching resources for students to choose through the Credit bank platform, which can meet the learning needs of different students, and build a sound teaching resource system for Digital creativity and Media professional groups.

2.2.3 Improve the certification conversion rules.

Combining the aspects of science, diversity, consistency, etc., establish three sets of standards, such as process standards, certification standards, and credit conversion standards for professional group credit certification, to ensure the consistency of conversion rules.

2.2.4 Improve the management and operation mechanism.

Taking advantage of school-enterprise cooperation by means of information technology, it is planned to establish one "intelligent management platform of Credit bank for professional groups" to improve platform functions and build an integrated intelligent management platform for credit storage, teaching management and evaluation, and the number of registered students (two grade) 20%.

3 Construction content

The construction of this project is divided into theoretical research and project practice. Under the guidance of experts, combining international and domestic current situation research and basic research with Credit bank, the overall project design is carried on, as shown in Figure 1.

![Project construction overall plan (self-painted)](image)

The details are as follows:

3.1 Conducting research on student needs

Conduct preliminary research on the Credit bank system, understand the students' learning needs, and the current work and study time allocation and other objective situations, and write a research report on the need to replace credits, etc., to prepare for the subsequent establishment of the Credit bank system. Foreshadowing and provide the corresponding basis.

3.2 Establish a learning outcomes framework

Identify the basis for learning outcomes. The professional talent training program is based on the curriculum system, and the learning outcomes and credits are produced from the curriculum. The learning outcomes must correspond to the curriculum system, and the curriculum is the basis of the learning outcomes. Determine which courses are eligible for credit replacement in the vocational skill level certificate or in the corresponding job position.

Identify categories of learning outcomes. If it is said that the learning outcomes are related to the curriculum system and can constitute the vertical development of the learning outcome system, then under a certain course or a certain type of course, it is necessary to clarify the different types of learning outcomes to constitute the horizontal development of the learning outcome system. From a practical point of view, skills competitions, social service projects, qualification certificates, awards or awards, etc., can be used as the main categories of learning outcomes.

Clarify the value of learning outcomes. The so-called value refers to the value of a specific learning outcome that can be recognized in the corresponding professional learning outcome system and can be used for conversion or comparison. Different types of learning outcomes can only be converted if they are identified as corresponding values or proportions.

3.3 It is proposed to establish an intelligent management platform for Credit bank for professional groups

In view of the problems existing in the current exploration and practice of Credit banking, such as the lack of close connection with professional groups, the incomplete construction of qualification framework, the uncertainty of credit sources, unclear credit transfer rules, and the non-standard credit determination process, the
research of this project relies on the information platform. It is planned to build a Credit bank intelligent management platform based on the Digital creativity and Media professional group by combining information technology and bidding. Based on the construction elements of professional groups, build a closed-loop teaching management system that communicates with each other between teaching management and evaluation, and form a digital Digital creativity and Media professional group database and student qualification credit data, as shown in Figure 2.

3.4 Establishing Credit bank recognition conversion standards

3.4.1 Improve process standards.

The process standard refers to the work process and work rules that must be followed when "credit recognition and conversion" in the Credit bank system. The purpose of establishing and perfecting process standards is to ensure the standardization of credit recognition and improve the work efficiency of the recognition process. The establishment of process standards includes both work processes and work rules. The workflow is mainly used to standardize the credit recognition and conversion work itself, including the bank account opening process, the credit storage process, the credit accumulation process, the credit certification process, the credit conversion process, the credit management and evaluation process, etc.; The work rules are mainly used to regulate the managers engaged in the credit recognition and transfer work, including the manager's responsibilities, the work system to follow, and the work content to be completed, as shown in Figure 3.

3.4.2 Improve the credit recognition standards.

The purpose of establishing and improving the credit recognition standards is to strictly regulate the "input" link of learning outcomes to ensure the value of the learning outcomes recognized by the Credit bank. Formal classroom education needs to standardize and standardize the courses offered, and clearly identify the course modules, course types, learning methods, assessment methods, etc.; the most complex part of the standard formulation in the credit identification of informal learning outcomes can be combined with interviews, defenses, on-site Inspection and other forms, using file evaluation method, ability test method, observation method, statement method and simulation method and other identification methods.

Preliminary formulation of corresponding credit replacement rules:
- Establish the non-replaceable and replaceable courses, the upper limit of replacement credits and the replacement ratio in the talent training plan.
- Establish the corresponding relationship between the learning outcomes obtained by students during their school days and the replacement courses of academic education courses (including the corresponding relationship between the ranking of learning outcomes, grades, workload, etc. and courses or credits).
- Establish scores or grades corresponding to learning outcomes and courses related to academic education.
- Establish the method for dealing with the excess credits after replacement in the Credit bank. Specific projects and credits can be displayed on the student's student status card or transcript to encourage students to expand themselves and achieve comprehensive development during school.

3.4.3 Improve credit transfer standards.

Credit transfer standards are normative interpretations and definitions of the process by which students convert accumulated credits into corresponding courses, certificates or diplomas [2]. The purpose of establishing and improving credit transfer standards is to ensure the fairness of learning outcomes by strictly regulating the "output" link.

It is used to convert learning-related content, such as converting to corresponding courses and converting to related certificates. This is the most common and most basic use.

As an important reference for the selection and method of relevant awards and honors.

3.5 Establish a Credit bank learning resource system

The learning resource system covers all the courses in the curriculum system of each professional talent training program in the professional group, so that students can choose relevant courses when applying for credit recognition and conversion; it also includes social projects, enterprise projects, skills competitions, etc [3].
For example, if a student applies for credit recognition with a skill competition award certificate, the course A in the major must be found in the course library of the educational administration system. Course A may be a public course, a professional compulsory course, a professional elective course, etc., so the course library must contain a large number of courses, as shown in Figure 4.

![Fig. 4. Credit bank Learning Resource System for Digital creativity and Media professional group (self-painted)](https://doi.org/10.1051/shsconf/202315702018)

### 4 System guarantee

In order to ensure the smooth, fair and effective progress of "credit recognition and transfer" in the Credit bank system, and to formulate a strict operating mechanism, a special "standards committee" and "quality committee" can be established to carry out the development planning and standard formulation of the Credit bank. Professional guidance, build a quality assurance system for the construction and operation of the Credit bank system, control and adjust the departments and important links involved in the main work of the Credit bank, and ensure that the credit recognition process is evidence-based and the results are reliable. At the same time, while ensuring the comprehensiveness of the Credit bank system, it is necessary to further clarify the responsibilities of each person in charge in the professional group, further standardize the Credit bank and operation procedures, and further improve the informatization level of the Credit bank system.

### 5 Optimizing the Credit bank system and project promotion

The establishment and development of the Credit bank system involves all aspects of the educational system reform. To ensure the smooth construction and implementation of the Credit bank system, it must be established on the basis of the "credit system". In the discussion of the teaching practice of the Credit bank by the Digital creativity and Media professional group, it is necessary to break through the differences between different education types, different college types, and different types of education. The obstacles of mutual selection of courses and mutual recognition of credits between majors reduce students' repeated learning and improve students' learning efficiency; form research reports through project research and promote experience.

### 6 Conclusions

The Credit bank is connected to the construction of professional groups, which can design and implement the credit system in combination with the characteristics of various majors in the professional group. On the one hand, it can give full play to students' individual strengths, better meet their willingness to learn and employment, and truly improve the quality of talent training. To achieve high-quality employment; on the other hand, it is also beneficial for schools to use external learning resources to improve the operability and sustainability of related systems. With the enrichment of teaching resources and the improvement of management level and service capabilities, the "freedom" of learners' choice will gradually expand, and the role of Credit banks will be better played.

### References

1. Ji Xin, Li Linshu, Collection of Research and Exploration on Credit bank System Construction, China Central Radio and Television University Press, 2015.12