

Construction of an Evaluation Index System for Innovation and Entrepreneurship Education in Vocational Colleges from Students' Perspective

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Abstract: Innovation and entrepreneurship education is an essential content in the current teaching of colleges and universities and an important driving force to promote students' employment. Currently, colleges and universities continue to strengthen the innovation of innovation and entrepreneurship teaching, and the construction of the evaluation system of innovation and entrepreneurship education is lagging. The evaluation system is an important evaluation standard for innovation and entrepreneurship teaching and the basis for educational innovation, which is also a critical part of teaching that requires attention. This paper takes the construction of the evaluation index system of innovation and entrepreneurship education in vocational colleges as the research goal and understands the function of innovation and entrepreneurship evaluation as well as the evaluation principle through the literature analysis method. It also analyzes the evaluation index system of innovation and entrepreneurship teaching from students' perspective to provide an effective reference for the implementation of innovation and entrepreneurship education in higher vocational colleges.

Keywords: Student perspective; Vocational college; Innovation and entrepreneurship education; Evaluation index system

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1. Introduction

The economic development of the current society has changed from the traditional resource-driven mode to the innovation-driven mode, and science and technology as well as the innovation quality of laborers have become the main driving force of economic development. This change also puts forward higher requirements for the cultivation of innovative talents, and the proposal of innovation and entrepreneurship education needs to be transformed from external policies and economic development to promote the growth of talents and meet the internal needs of students. Higher vocational colleges and universities are the bases for cultivating technical talents, and they need to take the important responsibilities of cultivating innovative and entrepreneurial talents, deepening the cognition of innovative and entrepreneurial education, integrating innovative and entrepreneurial education with school teaching and management, building a scientific teaching system, constructing innovative and entrepreneurial education bases, optimizing the education curriculum, training the education team, and

promoting the innovative and entrepreneurial teaching to the development of specialization and systematization. However, in the current development of innovation and entrepreneurship teaching, there is a notable lack of clarity, highlighting the urgent need for a comprehensive evaluation system. Such a system is essential for assessing the effectiveness of innovation and entrepreneurship education and understanding the impact of various elements. By analyzing the results from this evaluation system, we can better regulate these elements and ensure the healthy development of innovation and entrepreneurship education in vocational colleges.

2. Evaluation function of innovation and entrepreneurship education in vocational colleges

2.1. Communication of innovation and entrepreneurship

The evaluation of innovation and entrepreneurship education is an open teaching system model, and the interaction of information needs to be formed between the subject of evaluation and the evaluator, the evaluator and the evaluator, and the subject of evaluation and the decision maker. Evaluation of innovation and entrepreneurship education can provide effective feedback information for the development of innovation and entrepreneurship teaching so that the subject being evaluated understands its strengths and weaknesses, and at the same time, constantly makes self-improvement when compared with the strengths of others. After the evaluation information of innovation and entrepreneurship education is obtained, it can also promote the communication between the subject being evaluated, and form a deeper understanding of innovation and entrepreneurship in the process of communication^[1]. For innovation and entrepreneurship education in colleges and universities, the communication after the evaluation of innovation and entrepreneurship education can realize the sharing of excellent experience, constantly improve their comprehensive strength, and make a clear direction for their development.

2.2. Guidance on the direction of development

The evaluation of innovation and entrepreneurship education in vocational colleges and universities has a certain guiding role, which can provide teachers and students of innovation and entrepreneurship with a more scientific development direction. The evaluation system of innovation and entrepreneurship education is designed with strong relevance and purpose, and clear evaluation standards and evaluation procedures are set. At the same time, developing a more standardized program for evaluating innovation and entrepreneurship education, supported by policies and guidelines, is beneficial for aligning teaching goals and directions. This helps ensure consistency and effectiveness in the educational approach. Generally, innovation and entrepreneurship education will be carried out on the basis of innovation and entrepreneurship evaluation standards. The focus of the evaluation standard is the direction of innovation and entrepreneurship evaluation. The content of the evaluation program is to guide the evaluation object to carry out the work in accordance with the program. It can be seen that the evaluation system of innovation and entrepreneurship teaching in vocational colleges and universities is a baton for teachers and students, which can guide teachers and students to develop in a more ideal direction.

2.3. Promotion of career planning

The evaluation of innovation and entrepreneurship education in vocational colleges needs to be carried out throughout the whole process of innovation and entrepreneurship education, and the evaluation of innovation and entrepreneurship education provides an effective planning role for the development of innovation and entrepreneurship education, which is conducive to the timely discovery of the problems in innovation and

entrepreneurship education and provides the corresponding feedback information to promote the continuous improvement of innovation and entrepreneurship education. After the planning of the innovation and entrepreneurship education program is completed, education evaluation needs to analyze the rationality of the program to ensure the correctness of the development direction of innovation and entrepreneurship education. Combined with the evaluation results of innovation and entrepreneurship education activities, the relevant information of teachers involved in innovation and entrepreneurship is collected to provide more intuitive feedback for the evaluation work and to ensure that innovation and entrepreneurship activities are put in place to meet the evaluation standards. At the same time, it is conducive to stimulating the enthusiasm of teachers and students involved in innovation and entrepreneurship education and taking timely and effective measures to test the educational achievements and make up for and improve the problems that exist in them ^[2].

3. Principles of evaluation of innovation and entrepreneurship education in vocational colleges

3.1. Educational nature

The educational evaluation system is an important component of innovation and entrepreneurship teaching, which is conducive to the timely discovery of educational problems and provides positive conditions for innovation and entrepreneurship education. In the implementation of the “principle of educativeness,” the educational evaluation system can be realized in the following aspects: firstly, the purpose of educational evaluation is clarified. Before the evaluation of innovation and entrepreneurship education is carried out, the evaluation goal should be first determined. Educational evaluation is not to nitpick the problems of teachers or students in teaching but to help teachers and students find problems and the reasons, and provide the right direction for the subsequent educational work. Secondly, to play the guiding role of teaching evaluation, the traditional education evaluation focuses too much on the final summative evaluation and emphasizes the results, which leads to problems in education that cannot be corrected in time. In order to effectively solve this problem, we can use dynamic evaluation, timely detection of teacher or student problems, and guidance to correct them.

3.2. Process evaluation subjectivity

Process evaluation refers to the way to evaluate the whole process of innovation and entrepreneurship education activities, and timely detection of educational deficiencies and appropriate adjustment. The purpose of process evaluation is to analyze the rationality of innovation and entrepreneurship education activities, to facilitate timely access to feedback information on education activities, to take effective adjustment measures for the problems of teachers and students, and to ensure the quality of process evaluation activities. The process evaluation itself has a guiding role, which can guide teachers and students in the process of innovation and entrepreneurship teaching, rather than correcting them after the completion of the activity. Compared with the result evaluation, process evaluation has a stronger corrective effect on innovation and entrepreneurship teaching, which can take the educational objectives as a benchmark and better show the educational effectiveness ^[3]. Therefore, in the evaluation of innovation and entrepreneurship education in vocational schools, the combination of process and result evaluation should be used, with emphasis on the process evaluation.

3.3. Quantitative and qualitative evaluation

In the development of innovation and entrepreneurship teaching in vocational colleges, quantitative evaluation refers to obtaining specific data through mathematical methods and giving corresponding evaluation through

data processing and analysis. That is, quantitative evaluation needs to describe the results of innovation and entrepreneurship evaluation through the digital form. The conclusion of this evaluation method is more intuitive and fairer, so it is more widely used in teaching evaluation. However, quantitative evaluation has certain application limitations, and some factors that cannot be quantified cannot be applied to the evaluation, which will lead to the results of the evaluation being not comprehensive enough and affect the overall evaluation effect. Therefore, qualitative evaluation is also needed, such as through literature research, interviews, and other ways to collect evaluation information, describe and analyze the situation of the evaluation object through text, or combine the experience of the evaluator to give the corresponding evaluation criteria. Most of the activity effects in innovation and entrepreneurship education cannot be evaluated through quantitative evaluation, so it is necessary to adopt the method combining quantitative and qualitative evaluation.

4. Evaluation index system of innovation and entrepreneurship education in vocational colleges from students' perspective

4.1. Constructing scientific talent evaluation index

Through the survey of students, it can be seen that there is a certain gap between the students' demand for the construction of an evaluation index system of innovation and entrepreneurship education and the evaluation indexes of the school, and the evaluation suggestions of students' innovation and entrepreneurship education can reflect the demand for innovation and entrepreneurship education in colleges and universities more directly. Therefore, in the evaluation of innovation and entrepreneurship teaching, it is necessary to integrate the students' opinions, construct the matrix of innovation and entrepreneurship evaluation indexes, reasonably determine the weight of each index, and form a scientific evaluation system of innovation and entrepreneurship teaching. Through the survey of students, it can be found that students pay more attention to innovation and entrepreneurship indicators, including the management of innovation and entrepreneurship education, the teacher structure of innovation and entrepreneurship education, practical activities, innovation and entrepreneurship platforms, educational environment, and incentives and feedback mechanisms, etc. Based on this, sub-evaluation indicators are set. In addition, students believe that in the setting of evaluation indicators, all of them should adopt the way of tracking evaluation.

4.2. Evaluation of innovation and entrepreneurship teaching environment

Innovation and entrepreneurship teaching conditions are the material guarantee for educational activities, which include the construction of educational bases, teaching facilities, and financial investment in teaching. The evaluation of innovation and entrepreneurship teaching conditions and environment should start from the following aspects. Firstly, the practicability of innovation and entrepreneurship education is relatively strong, and the teaching environment is a practicable place and important support for innovation and entrepreneurship education. If a course relies solely on oral narration, it may struggle to engage students effectively. To enhance student engagement and experience, teachers should utilize the external environment and interactive methods. Therefore, when evaluating innovation and entrepreneurship projects, it is important to also assess the quality of the educational environment created ^[4]. Including the evaluation of physical space in innovation and entrepreneurship practice teaching is crucial. This involves assessing the effectiveness of operational sites and equipment, the comprehensiveness of policy guidance, and the presence of systematic legal frameworks, as well as the project's survival rate. A well-developed environment for innovation and entrepreneurship education helps students gain practical experience, provides a conducive space for creativity, and encourages experimentation and innovation. In addition to the evaluation of the practice base construction environment

within vocational colleges and universities, it is also necessary to do a good job in the evaluation of off-campus practice bases, including the rules and regulations of external bases, workflow, and corporate culture. Evaluation ensures that students gain a deeper understanding of innovation and entrepreneurship through practical experience with external bases. This helps students make more informed judgments about future innovations and employment opportunities, providing them with clearer goals both in their studies and future careers.

The methods of evaluation can be observation and questionnaire methods. For example, observation of students' practice in the practice base, observation and evaluation of the layout of the base, and the construction of various facilities by means of video recording. In the process of observation, it is necessary to have a clear goal, determine the time, place, and goal of observation, and do a good job of publicizing all observations and evaluations. At the same time, it is important to prepare an observation outline in advance, classify the content of the observation, and systematically organize and collect observation records. The interview method can also be used for evaluation. The interview method is an evaluation method that realizes the collection of evaluation information through dialogue and communication with the evaluator. Interviews can obtain deeper information, targeting the need to understand and the existence of confusion in the depth of the questioning, to ensure the depth and comprehensiveness of the information obtained, and more adequate information can ensure the rationality of the evaluation structure.

4.3. Content evaluation of innovation and entrepreneurship education

The content evaluation of innovation and entrepreneurship education should be carried out strictly according to the education plan, and the effect of innovation and entrepreneurship awareness cultivation can be achieved through the setting of innovation and entrepreneurship courses and the optimization of innovation and entrepreneurship techniques. First of all, evaluating the innovation and entrepreneurship education plan, which serves as a guiding document for talent cultivation in schools, is crucial. The cultivation goals outlined in the plan form the foundation for organizing school activities. Ensuring the rationality and effectiveness of the plan is essential to achieving these goals. Innovation and entrepreneurship education should be oriented to all students but differ between different majors. Therefore, in the content evaluation of innovation and entrepreneurship, it is necessary to plan from the aspects of the number of courses, categories, credit hours, and so on. Secondly, training from the aspect of innovation and entrepreneurship teaching materials is imperative as teaching materials are the foundation of innovation and entrepreneurship education, which is conducive to helping students establish correct values. The knowledge content of the teaching materials is the condensation of the knowledge of innovation and entrepreneurship education, so the evaluation of the teaching materials is also the key to ensuring that students can better master innovation and entrepreneurship skills. Lastly, the evaluation of innovation and entrepreneurship education curriculum is necessary; the curriculum is the carrier of education work, but also an important way to guide students to achieve innovation and entrepreneurship goals. Therefore, in the evaluation, it is necessary to determine whether the innovation and entrepreneurship curriculum is systematic, whether there are gaps in the curriculum, whether the curriculum meets the learning needs of students and management requirements, whether there is inter-disciplinary integration, etc. ^[5]. These are also the original purpose of the innovative entrepreneurship curriculum.

The evaluation method of innovation and entrepreneurship includes the questionnaire evaluation method, which combines the evaluation criteria of course design, designs the questionnaire, and assigns the students to fill in the questionnaire, so as to obtain the corresponding evaluation information. The evaluation content of the questionnaire design should include the understanding of consciousness and the evaluation of behavior.

Among them, the understanding of consciousness includes students' satisfaction with the design of innovative entrepreneurship teaching hours, satisfaction with credit allocation, satisfaction with the curriculum, and other opinions. Behavioral evaluation, on the other hand, includes the impact of the course on one's own thinking as well as the impact of behavior. Adopting an open-ended questionnaire, different questionnaires can be designed in combination with different majors. Differentiated answer modes are designed on different questions, which is conducive to the comprehensive collection of evaluation information.

4.4. Evaluation of innovation and entrepreneurship teaching performance results

The main body of innovation and entrepreneurship education is students, and the performance of students in the evaluation of innovation and entrepreneurship education activities is the key to evaluation, which can reflect the effect of innovation and entrepreneurship education. Therefore, innovation and entrepreneurship education objectives can be taken as the evaluation standard, and the changes in students' innovation and entrepreneurship education activities can be understood through the observation of students' performance, which can be used to react to the results of innovation and entrepreneurship education. The evaluation of students' performance can be assessed in terms of both the creativity and entrepreneurial ability of students. It includes whether the creativity activities are novel, practical, and socially valuable, and the evaluation assessment of entrepreneurship mainly includes the planning of entrepreneurial activities, new ways of service, and so on. In addition, it also includes students' participation in innovation and entrepreneurship activities, and the number of innovation and entrepreneurship achievements.

The evaluation methods of the value of innovation and entrepreneurship teaching mainly include the work analysis method, seminar evaluation method, and achievement evaluation method. Among them, the work analysis method refers to analyzing students' works and evaluating them according to the thematicity of work creation. Developing scientific analysis indexes, different evaluation forms can be made for different innovation and entrepreneurship units, and students' curiosity, imagination, and adventurousness can be tracked and recorded. Samples are selected from students' creative ventures as a basis for evaluation. Lastly, the results are analyzed and summarized in the later stage of evaluation, which is summarized by judging records of different categories, and score rate analysis to understand the real situation of students' innovation and entrepreneurship. The seminar evaluation method refers to the inclusion of students' participation in classroom discussions and class activities in the academic assessment, focusing on the assessment of students' ability to think as well as their ability to put forward ideas. It can be specifically divided into innovative thinking, innovative ability, entrepreneurial skills, and so on. Guiding students to understand the principles of skill operation through in-depth discussion of theoretical and practical issues enhances their cognitive abilities. This approach also plays a significant role in boosting students' motivation and engagement.

5. Conclusion

In summary, in the construction of an evaluation index system of innovation and entrepreneurship education in higher vocational colleges and universities, different perspectives of students and schools will give varying results. The construction of an evaluation index system of innovation and entrepreneurship education from the students' perspective can better meet students' needs, so it is necessary to construct evaluation indexes from the students' perspective, form a tracking management method, ensure the scientificity and effectiveness of evaluation, and provide effective guidance for innovation and entrepreneurship teaching.

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