

## Analysis on the Reform of Higher Vocational Teaching Methods Under the Cultivation of Innovation Ability

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**Abstract.** With the continuous improvement of our country's modern education system, the role and status of higher vocational colleges are constantly improving. As an important educational base for cultivating technical and application-oriented talents, higher vocational colleges must do well in teaching reform. In the process of reform and development of higher vocational colleges, it is necessary to do well in cultivating students' innovative ability, adopting a scientific teaching model, strengthening the innovation of teaching methods, and continuously strengthening students' core literacy and innovation ability, which is an inevitable way to cultivate high-quality talents. Therefore, this paper will conduct in-depth research and analysis on the reform of higher vocational teaching methods under the cultivation of innovative ability, and summarize some measures based on practical experience, in order to help relevant personnel.

**Keywords.** Higher Vocational Education; Innovation Ability; Teaching Method; Teaching Reform; Optimization Measures

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### 1. Introduction

We must do well in cultivating students' innovative ability in order to improve the quality of talent training. Innovative ability is a basic feature that modern talents must have, therefore, it is necessary to strengthen the reform of innovative ability training methods, which is the main work of education and teaching in higher vocational colleges. In the teaching process of higher vocational colleges, it is necessary to continuously optimize teaching methods, increase the emphasis on cultivating students' innovative ability, and optimize the training methods in combination with students' professional courses, personal abilities, and career planning to ensure that students have a good sense of innovation

and innovation ability which is an important way to cultivate high-quality talents in the new era.

## **2. Analysis of the importance of cultivating students' innovative ability in higher vocational colleges**

With the development of the times, the talents needed in today's society are compound talents with innovative ability, and innovative ability needs to be cultivated from an early age. Only in this way can students establish a high degree of innovative spirit and innovative consciousness. Therefore, higher vocational colleges need to continuously strengthen the cultivation of students' innovative ability, so that they can grow into talents needed by the society in the future. The innovative education carried out at the stage of higher vocational colleges is actually to cultivate students' innovative ability, because the improvement of innovative ability mainly depends on continuous learning, and ultimately depends on innovative education. As an important base for cultivating students' innovative consciousness, higher vocational colleges shoulder the important mission of cultivating national spirit and cultivating innovative talents. The cultivation of innovation ability can be highly integrated with the teaching of higher vocational colleges. In the process of learning, students can not only learn the knowledge of this major, improve their knowledge reserve and technical level, but also strengthen their innovation ability in the process of learning. Stimulate students' wisdom and potential, so as to further stimulate students' creative ability, so that students' thinking can be fully exercised and strengthened. Innovation ability is the basic ability that modern high-quality talents must have, which can fully demonstrate the quality of talents. Therefore, it is necessary to continuously strengthen the cultivation of students' innovation ability, and constantly optimize the innovation ability training mode, so that it can meet the needs of students' innovation ability improvement. To this end, it is necessary to combine the current situation of training work, clarify the main problems, do a good job in the reform of innovative ability training mode, and promote the innovation of teaching mode in higher vocational colleges, so as to cultivate more high-quality talents and ensure that students' ability level meets the needs of social development <sup>[1]</sup>.

## **3. Analysis of the problems existing in the cultivation of innovation ability in current higher vocational colleges**

Combined with the actual teaching situation of some higher vocational colleges, there is a lag in the cultivation of innovation ability. Some of them not only do not have special training courses, but there is no relevant training mode in many majors, besides, there is no integration of innovation ability education in the teaching process of professional courses. Some higher vocational colleges take the final grade as the teaching goal, and the teaching methods are traditional and simplex, especially in the aspect of innovation ability training. The training methods are relatively backward that unable to meet the needs of students' innovative ability learning, and have a negative impact on students' career development. Innovation ability is the basic quality that modern talents must have. Higher vocational colleges must aim to cultivate students' innovation ability. Therefore, the state attaches more importance to the cultivation of vocational and technical ability, while teachers and students pay attention to the learn professional knowledge and innovation. Lack of awareness of competencies in education and learning. Innovative ability learning is of great significance to students' life-long growth

and development. Therefore, it is necessary to cultivate teachers' innovative ability, continuously optimize innovative teaching methods, improve innovative ability, play the practical role of innovative ability teaching, and promote the comprehensive development of students' comprehensive quality. At present, some colleges and universities do not pay enough attention to the cultivation of innovation ability, and lack scientific training and teaching methods, so that students cannot receive good innovation ability education, which has an adverse impact on students' career development and lifelong development. The main problem exists. In addition, combined with the actual teaching situation of some higher vocational colleges, the innovation ability training system is not scientific enough, lacks a standardized teaching system, the effect of improving students' innovation ability is not obvious enough, and there is a lack of teaching content to improve students' innovation ability. The teaching method lacks innovation and the teaching mode lacks flexibility, which deviates from the teaching goal of cultivating students' innovative ability, which seriously affects the training effect of innovative ability. To improve the level of its own innovation ability, it is necessary to strengthen the optimization and reform of the innovation ability training system [2].

#### **4. Analysis of effective strategies for the reform of higher vocational teaching methods under the cultivation of innovation ability**

From the above analysis, it is clear that the cultivation of innovation ability is of great significance to the development of students in higher vocational colleges, and it is the necessary basis for the cultivation of high-quality talents, which can comprehensively improve the quality of talent cultivation. However, considering the current actual situation, There are many colleges still have some problems in the cultivation of innovation ability in schools, which lead to insufficient innovation ability of students and seriously affect the development of students. Therefore, combined with relevant practical experience, this paper summarizes the following scientific and effective measures for cultivating innovation ability:

##### ***4.1. Change the traditional teaching mode and optimize the innovative ability training method***

In traditional teaching of innovation ability,, the main role of students in learning of innovation ability is ignored. Many teachers in higher vocational colleges still use traditional teaching methods, and the teaching concept is too backward, which only focusing on mechanical transmission of knowledge and not paying enough attention to the cultivation of students' innovative ability. Students can only passively accept the innovative ability knowledge passed on by teachers, which leads to student lack of interest in learning and seriously affects students' learning and innovative ability. The enthusiasm of students, thus restricting the improvement of students' innovative ability. Therefore, the teaching of innovative ability in higher vocational colleges needs to put students in the main position, change the traditional teaching mode, adopt innovative teaching methods, and gradually improve students' innovative ability. For example, in some professional teaching, teachers only focus on explaining the answers to the questions, ignoring the students' exploration of the nature of the questions. Therefore, students can obtain the correct answers to the questions in other ways by strengthening the students' thinking ability. Help students to better understand the nature of the problem. This way can promote students' thinking, let students strengthen their innovative ability in thinking, help students develop the

habit of thinking, so that students' innovative ability and innovative awareness can be effectively improved. It is an important teaching work that higher vocational colleges must do well<sup>[3]</sup>.

#### ***4.2. Respect the dominant position of students and enhance their initiative***

In the process of cultivating innovation ability, the reform and exploration of higher vocational teaching based on the cultivation of innovation ability requires teachers to reflect the dominant position of students in the teaching process. Reasonable learning content highlights the important position of students as the subject of learning. In teaching process, teachers should always pay attention to the students' learning situation and emotions, and not only carry out teaching according to the teachers' thinking logic. The cultivation of innovative ability requires students to have a sense of active learning, so it is necessary to fully respect the dominant position of students and improve students' learning initiative. If the innovative ability training mode is too passive, it will not improve students' innovative ability, so it is necessary to always pay attention to the students' dominant role, adjust teaching progress according to the students' learning situation, so that the teaching is always student-centered, clarify the current students' level of innovation ability, and adjust the innovation ability training model based on this. Through the optimization of the innovation ability training model, we can guide students to build their self-awareness and make them clear the importance of innovation ability training. Combined with the optimization and reform of relevant teaching methods, the quality of innovation ability education and training can be comprehensively improved, which is the key to the current innovation ability training reform. The key points need to be fully implemented in the process of teaching method reform to ensure that teaching methods are fully optimized. By placing students in the main position of teaching, it can improve students' learning initiative, and combined with teachers' scientific guidance, it can comprehensively improve students' innovative ability, which is an important measure for the reform of teaching methods in higher vocational colleges.

#### ***4.3. Combined with the career development of students, optimize the training mode of innovation ability***

Higher vocational colleges and conventional colleges have different teaching objectives and talent training directions. They pay more attention to the cultivation of students' practical ability, take students' career development as the basic orientation, and have higher requirements for innovation ability. Therefore, it is necessary to strengthen the training of students' practical ability. In the cultivation of innovation ability, in the process of cultivation, it is necessary to fully combine the career development direction of students, based on the career development of students, improve the pertinence of innovation ability training, and comprehensively optimize the training content, so that students can strengthen innovation ability in the professional field. It plays an important role in the development of students' future employment and professional ability, and can comprehensively improve the level of students' professional ability and carry out related work with their high level of innovation ability. Higher vocational innovation ability teaching must be combined with students' career development, which is an important goal of higher vocational innovation ability teaching reform. , show a high level of innovation ability in the job and career<sup>[4]</sup>.

#### ***4.4. Combined with professional course content, strengthen teaching method innovation***

Different majors in higher vocational colleges have different requirements for students' innovative ability. Therefore, it is necessary to reform and optimize innovative ability training methods in combination with specific professional curriculum content, and adopt targeted training methods to ensure the improvement of students' innovative ability. Taking the mechanical manufacturing major in higher vocational colleges as an example, as an applied major, teachers should pay more attention to practical teaching and constantly innovate practical teaching methods. For example, in the teaching of "the composition and principle of belt drive", teachers can use a combination of various teaching methods. First, use multimedia to play relevant videos of belt drives for students. Teachers can also make a simple animation. Let the students clarify the working principle of the belt drive, and then combine the physical teaching to let the students practice the components of the belt drive, so as to let the students know the composition and principle of the belt drive, and also provide some simple raw materials for the students, let the students assemble a The simple belt drive related model enables students' theoretical knowledge to be strengthened in practice, which is an effective teaching method. The innovation of teaching methods can bring about the development of students' innovative ability. Teachers need to continuously innovate teaching methods so that students' innovative ability can be strengthened accordingly<sup>[5]</sup>.

## 5. Conclusion

To sum up, this paper briefly expounds the significance of the cultivation of innovation ability, and analyzes the common problems existing in the cultivation of innovation ability in higher vocational colleges. It can play a certain reference and help role in the teaching development of higher vocational colleges, and continuously improve the quality of innovation ability training.

## References

- [1] Huang Wenjing, Chen Xufeng, Li Junting. Research and practice on the reform of teaching methods and methods for mechanical and electrical majors in higher vocational colleges based on innovative ability training. *Nanfang Agricultural Machinery*, 2021, 52(20):3.
- [2] Wang Yunshi. Research and Practice on Cultivating Innovative Ability in Higher Vocational Teaching—Taking the Course of "Introduction to Electronic Commerce" as an example. *Contemporary Educational Practice and Teaching Research*, 2020(07):209-210.
- [3] Song Fangfang, Zhang Rongmei. Analysis on the reform of art design teaching in higher vocational colleges under the goal of training innovation ability. *Hebei Pictorial*, 2021(8):2.
- [4] Huang Han, Gan Xiangning, Li Shijian. Analysis and exploration of teaching methods based on the cultivation of innovative ability of higher vocational students. *Vocational Education*, 2020, 19(002):3.
- [5] Wang Yuxing. Exploration on footwear teaching reform based on the cultivation of innovation and entrepreneurship ability. *Chinese and Foreign Footwear*, 2020(10):3.