

## Application of "feedback - guidance" teaching model based on the concept of innovative entrepreneurship education concepts in nursing courses

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**Keywords:** feedback-guidance; teaching model; Innovation and entrepreneurship education; nursing courses

**Abstract:** We aim to exploring and evaluating the application effect of the 'feedback-guidance' teaching mode based on the concept of innovation and entrepreneurship education in nursing professional courses. 100 students from two classes of nursing majors in a nursing college in 2020 were selected as the research subjects. They were then randomly divided into a study group and a control group. There are 5-8 boys in each class taking Emergency Nursing as the implementation course, and the study group will implement the "feedback-guidance" teaching mode based on the integration of innovative and entrepreneurial education concepts. This model emphasizes students' participation, feedback and autonomous learning, which is helpful to improve their learning effect and professionalism. The results showed that after applying the "feedback-guidance" model, the scores of theoretical knowledge test and operational skills test of nursing students were significantly better than those of the control group. Statistical analysis showed that the difference was statistically significant ( $P < 0.05$ ). The satisfaction degree of nursing students in the research group was 98%, which was significantly higher than that in the control group (92%), and the difference was statistically significant ( $P < 0.05$ ). The application of "feedback-guidance" teaching mode in nursing courses has a positive impact on students' academic performance, innovative thinking and career development. This model encourages students to actively study and reflect, cultivates their innovative ability, and enables them to better cope with the ever-developing and ever-changing medical environment.

### 1. Introduction

Innovation and entrepreneurship education plays a vital role in the field of higher education today, and its influence on cultivating students' innovative spirit, entrepreneurial awareness and practical skills is increasingly significant. At the same time, the nursing specialty plays an increasingly important role in the modern medical system. As the core members of the medical team, nurses need to have rich professional knowledge and skills to provide high-quality patient care services[1]. Therefore, it has become one of the research focuses in the current education field to combine the concept of innovation and entrepreneurship education with nursing professional courses and explore a teaching model aimed at cultivating nursing students' innovative thinking and practical skills.

In the past decades, the educational circles have been discussing how to better cultivate students' innovative spirit and entrepreneurial consciousness. Traditional education mode focuses on imparting knowledge, while innovation and entrepreneurship education emphasizes the process of students' active participation, exploration and application of knowledge. This educational concept emphasizes students' autonomous learning and interdisciplinary cooperation to solve real-world problems[2-3]. It is in this context that a teaching model called "feedback-guidance" gradually emerges and is widely used in different disciplines.

The "feedback-guidance" teaching mode emphasizes students' learning and practical experience in practical projects, and constantly improves and develops their innovative ability through feedback loop. This model focuses on the close interaction between teachers and students, and

encourages students to ask questions, find solutions, accept suggestions and improve their work. This educational method is in line with the characteristics of nursing specialty, because nurses often have to face various emergencies at the medical site and need to have the ability to make quick decisions and solve problems[4]. Therefore, the introduction of "feedback-guidance" teaching mode into nursing courses is expected to cultivate nursing professionals with more innovative ability and practical skills.

The purpose of this study is to explore the application of "feedback-guidance" teaching mode in nursing professional courses, focusing on its effectiveness in cultivating innovative spirit and practical skills of nursing students. By analyzing the advantages and challenges of this teaching mode, we hope to provide useful experience and lessons for promoting the innovation of nursing education to meet the needs of nurses in the evolving medical environment. By integrating the concept of innovation and entrepreneurship education into nursing education, we are expected to provide a more dynamic, innovative and high-quality nursing team for future medical services.

## **2. Object and method**

### **2.1. Research objects**

100 students from two classes of nursing major in nursing college in 2020 were selected as the research object. They were randomly divided into study group and control group, and were divided into control group and study group according to teaching methods, with 50 students in each group. There are 5-8 boys in each class taking Emergency Nursing as the implementation course, and the research group will implement the "feedback-guidance" teaching mode based on the integration of innovative and entrepreneurial education concepts. The data of age and sex of the two groups of nursing students were comparable by statistical analysis ( $P > 0.05$ ).

Inclusion criteria:

- (1) third-year nursing students
- (2) Undergraduate nursing students

Exclusion criteria:

- (1) Students who drop out of school, resume school or change their major.
- (2) Students who refuse to participate in this study for personal reasons.

### **2.2. Method**

The control group received routine teaching, taking the course of Emergency Nursing as an example.

The research group gave "feedback-guidance" teaching method. This model emphasizes students' participation, feedback and autonomous learning, which is helpful to improve their learning effect and professionalism. The application of "feedback-guidance" teaching mode in nursing courses can be divided into the following steps:

Step 1: Course planning and goal setting

Before using the "feedback-guidance" teaching mode, we should first plan the curriculum and make clear the educational objectives. This includes determining the theme, objectives, teaching materials and evaluation methods of each course. Ensure that the objectives are specific and clear, so that the follow-up feedback and guidance can be more targeted.

Step 2: Prepare before class

Before the course begins, teachers prepare teaching materials, resources and teaching tools. Design students' tasks, which require their active participation in the learning process and provide materials for subsequent feedback.

Step 3: Classroom teaching

In class, teachers adopt interactive teaching methods to encourage students to ask questions, discuss and share their opinions. Teachers provide basic guidance on the course content, but also encourage students to study and think independently.

Step 4: Student Tasks and Projects

In order to promote students' active participation, teachers design various tasks and projects, such as group discussion, case analysis, simulation of clinical situations and so on. These tasks should be closely related to the course objectives and require students to apply what they have learned and skills.

**Step 5: Feedback and evaluation**

In the "feedback-guidance" mode, feedback is the key. Teachers provide regular feedback to guide students to improve their academic performance and clinical skills. Feedback can be verbal feedback, written feedback or the use of evaluation tools, such as evaluation forms and standardized tests.

**Step 6: Students learn independently.**

Encourage students to study independently and actively seek additional learning resources and opportunities to improve their professional quality. Teachers can provide students with references, online learning resources and practical opportunities.

**Step 7: Feedback loop**

Establishing feedback loop is the core of "feedback-guidance" mode. After students receive feedback, they should be able to adjust their learning methods and skills according to the feedback. This can be achieved through regular feedback meetings, discussions or mentoring sessions.

**Step 8: Evaluate and improve**

At the end of the course, teachers evaluate the whole teaching process, including teaching methods, student participation and academic achievements. According to these evaluation results, the teaching plan is improved and optimized to continuously improve the teaching quality.

The application of "feedback-guidance" teaching mode in nursing professional courses can better stimulate students' interest in learning, improve their professional quality, and promote autonomous learning and continuous improvement[5-6]. This model needs teachers' active participation and students' positive feedback to ensure the effectiveness of the teaching process and the success of students.

**2.3. Evaluating indicator**

At the end of the class, the teacher and the teaching team leader will conduct a unified examination of the nursing students' theoretical examination results and operational skills. Unified distribution of teaching satisfaction evaluation questionnaires. The survey results were divided into three items: satisfactory, satisfactory and to be improved. The questionnaire was collected anonymously and on the spot, and the questionnaire recovery rate was 100%.

**2.4. Statistical method**

Using SPSS 26.0, the difference was statistically significant with  $P < 0.05$ , the measurement data with  $(\bar{x} \pm s)$  was tested by T, and the counting data with (%) was tested by  $\chi^2$ .

**3. Result**

**3.1. Comparison of theory and skill assessment of nursing students before and after implementation**

Table 1 Comparison of theory and skill assessment of nursing students before and after implementation( $\bar{x} \pm s$ )

group	n	Examination of specialized theoretical knowledge	Examination of specialist operation skills
Research group	50	93.236±2.36	96.042±2.263
control group	50	85.302±1.14	83.618±1.737
T value		-2.46	-3.27
P value		<0.05	<0.05

After applying the "feedback-guidance" model, the scores of the theoretical knowledge test and

the operational skills test of the nursing students are obviously better than those of the control group. Statistical analysis showed that the difference was statistically significant ( $P < 0.05$ ). As shown in Table 1.

### 3.2. Comparison of teaching satisfaction between two groups of nursing students

The satisfaction degree of nursing students in the research group was 98%, which was significantly higher than that in the control group (92%), and the difference was statistically significant ( $P < 0.05$ ). As shown in Table 2.

Table 2 Comparison of teaching satisfaction between two groups of nursing students [person (%)]

group	Very satisfied	Basic satisfaction	Dissatisfied	degree of satisfaction
research group (n=50)	24(48)	25(50)	1(2)	49(98)
Control group (n=50)	18(36)	28(56)	4(8)	46(92)
$\chi^2$				5.012
P value				0.023

## 4. Discussion

Nursing is a comprehensive subject, which requires students to develop professional skills in a complex medical environment, and also needs innovative thinking and entrepreneurial ability to adapt to the ever-changing medical and nursing fields. Therefore, the "feedback-guidance" teaching mode based on the concept of innovation and entrepreneurship education has become an educational practice that has aroused widespread concern[7-8].

The "feedback-guidance" teaching mode based on the concept of innovation and entrepreneurship education emphasizes the following principles:

**Cultivation of innovative thinking:** Education should not only impart basic knowledge, but also stimulate students' innovative thinking and encourage them to find new ways to solve problems in clinical practice.

**Cultivation of entrepreneurial skills:** Students need to master entrepreneurial skills such as teamwork, project management and resource management to meet future career challenges.

**Practice-oriented:** learning is not only the teaching of theory, but also the emphasis on practical operation and the solution of practical problems.

**Personalized guidance:** Each student's needs and development speed are different, so personalized guidance is very important to ensure their full potential.

It is found that students' innovative thinking and entrepreneurial skills have been significantly improved in the course of applying the "feedback-guidance" teaching mode. They are more willing to try new methods, propose innovative solutions to problems and show greater entrepreneurial potential. This change is helpful for nursing students to become not only executors, but also problem solvers and innovators.

In the study, students actively participate in various innovative and entrepreneurial practice projects. These projects not only strengthen students' practical skills, but also provide them with valuable practical experience. Some researchers set up a traditional teaching group and a feedback teaching group through investigation and analysis[9-10]. The results show that the nursing students in the feedback teaching group have higher specialized theory, operational skills and teaching satisfaction than the traditional teaching group, which fully proves that the feedback teaching method can effectively stimulate the learning enthusiasm and initiative of nursing undergraduates and effectively improve the quality of clinical teaching.

Importantly, many projects have been successfully implemented, which encourages students' confidence. Students who apply "feedback-guidance" teaching mode show higher comprehensive quality and professional level in clinical practice. They can better cope with clinical challenges and provide safer, more effective and humanized nursing services. This helps to improve the quality and

satisfaction of patients' care, and also helps to reduce medical accidents and mistakes. Most importantly, nursing students who apply the "feedback-guidance" teaching model are more likely to become future nursing leaders and innovators after graduation. They have comprehensive quality, innovative thinking and entrepreneurial skills, which will enable them to succeed in the evolving medical and nursing fields and bring changes to the industry.

The application of "feedback-guidance" teaching mode based on the concept of innovation and entrepreneurship education in nursing courses provides students with a more comprehensive educational experience, which enables them not only to have professional knowledge and skills, but also to have the ability of innovation and entrepreneurship. This model will help nursing students better adapt to the changes in medical and nursing fields, improve their employment competitiveness, and also help to improve the quality and efficiency of nursing practice. In the future nursing education, this teaching mode should be actively popularized and applied to better meet the needs of students and society.

## 5. Conclusions

The results of this study show that the application of "feedback-guidance" teaching mode in nursing courses has a positive impact on students' academic performance, innovative thinking and career development. This model encourages students to actively study and reflect, cultivates their innovative ability, and enables them to better cope with the ever-developing and ever-changing medical environment. However, there are some limitations in this study. First of all, the research sample is limited, and the sample size needs to be further expanded to verify the universality of the results. Secondly, the implementation of the teaching mode needs additional teacher training and resource input. Finally, more research is needed to evaluate the long-term effect and the professional performance of graduates.

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