

# ***Ladder Training of Nursing Undergraduates' Professional Ability and Creative Ability***

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**Abstract:** With the rapid expansion of the education scale of higher nursing education in China and the continuous deepening of education reform, innovation and entrepreneurship education is constantly put forward. Innovative nursing talents require nursing students to have a certain degree of innovation ability. However, at present, the training of undergraduates' innovation abilities still has problems such as the emphasis on the essence of the form, the lack of systematicness of the teaching links, and neglect of the cultivation of students' initiative and creativity, and it is difficult to truly realize the transformation of knowledge into competence. The training of nursing talents should not stop at imparting professional theoretical knowledge and basic skills, but should also focus on the cultivation of their innovative abilities. Therefore, establishing a new concept of talent quality, adjusting the reform training model for nursing undergraduates according to their requirements, and cultivating qualified personnel for social development are the only way for the healthy development of nursing education in China. Based on the above background, this paper proposes a step-by-step training model based on “professional ability and innovation ability cultivation” to explore a more reasonable training method and improve the quality of nursing undergraduate students.

## **1. Introduction**

Innovative talents in the 21st century are groups of intellectuals and intellectuals characterized by pursuing new discoveries, exploring new laws, creating new doctrines, creating new methods, proposing new ideas, establishing new mechanisms, and accumulating new knowledge. Higher undergraduate nursing education should establish corresponding strategic goals in accordance with the characteristics of innovative talents in the 21st century, train comprehensively developed nursing innovative talents, meet social needs, and adapt to the future world. Establishing Innovative Education Philosophy Innovation education is a new educational concept. It abandons

the old education concept of advocating experience and advocating authority in traditional education, advocates daring to think, dare to do it, dare to speak up, and constantly proposes new ideas for new situations and problems. Innovation education is education aiming at cultivating students' innovative qualities and it is the connotation of quality education. To implement innovative education, we must establish a new concept of talent quality, new values of education, a new concept of education, a new concept of teaching, and comprehensively promote education innovation, to innovate education throughout the entire process of personnel training, implementation of each teaching link. Based on the above background, this paper proposes a step-by-step training model of "professional ability and innovation ability cultivation as the fundamental". The basic task of higher nursing education is to train students to become uniform and harmonious humanities spirit, nursing ability, and innovation ability.

## **2. The Dilemma of Training Innovative Talents for Nursing Undergraduates**

### **2.1. There is Innovative Talents Foster Concepts but no Innovative Talents Foster Environment**

The long-term exam-oriented education of the "sequelae" of exam-oriented education allows students to value scores rather than quality. School education emphasizes the transfer of knowledge but ignores the development of student personality. Education is inflexible. Students are accustomed to passive learning and lack the spirit of active discovery. Students pay attention to imitation and repetition while neglecting innovation and creativity. The cultivation of students' innovative qualities has not been valued since childhood, and has even been heavily suppressed. College students have a generally low level of innovation ability. The lack of innovation is mainly manifested in the following aspects: lack of deep thinking and new ways of learning ability, such as no new ideas to consider and deal with problems; no sense of innovation, lack of desire for creativity; lack of resilience to explore issues, such as the lack of personality in the way of thinking; Reverse thinking and critical thinking are low.

### **2.2. The Innovation Guidance of Clinical Nursing Teachers is "Insufficient"**

Nursing is a highly applied science. Its development and progress are not only influenced by theoretical level and practical experience.

And it is deeply influenced by the way of thinking and innovation in this field. The innovative training of nursing students during the internship phase is of utmost importance. Observations and nursing activities in clinical practice can inspire students' sense of innovation and improve their ability to analyze problems and solve problems. In recent years, although the level of nursing professional in China has been greatly improved, the innovative ability of clinical first-line nurses is still lacking. Research shows that the clinical nursing staff innovation behavior is at a medium level. Due to the limited ability of self-innovation, clinical nursing teachers do not have enough ability to guide students to carry out innovation activities. The teaching methods and training models adopted are weak in stimulating students' innovative potential. They cannot correctly guide students' innovation consciousness and innovation behavior. Therefore, many students have a strong sense of loss during the internship phase because they cannot see the development of professional development space and personal values.

### **2.3. Lack of Innovative Cultural Atmosphere**

Innovation requires a good atmosphere, and a good atmosphere of innovation has a tremendous

boost to individual students and overall innovation. Innovation atmosphere is a consistent cognitive experience among the members of the organization on the characteristics of innovation, and as a lasting characteristic, it constantly influences innovation behavior. However, under the examination-oriented education, most nursing students lack the spirit of questioning and criticism. The students are superstitious and authoritative. They believe that the teacher is right and does not have the spirit of challenge. Even if there is creativity passing by, it is often self-denying. Students are less adventurous and unconventional. They are often considered to be “heresy”. Good students’ standards are well-behaved. Learning good knowledge and getting high marks are the first priority, and procedural and model thinking makes innovations suppressed or even stifle. Due to the lack of a tolerant atmosphere, students are generally afraid of failure. They are ridiculed and deprived by their peers, lack self-confidence, and innovative behaviors are often ignored.

### **3. The Reasons for the Lack of Professional Innovation and Exploration Initiative of Nursing Students**

#### **3.1. The Passive Choice of Professional Choice**

Every student who chooses to nurse is free to choose before and after his college entrance examination, but this freedom is limited. Students are always influenced by a variety of factors such as college entrance examination results, parents and friends' suggestions and their own interests. The vast majority of nursing students are tuned. Even if they are the first volunteers to fill in their nursing care, many of them are volunteers to fill in the survey. Personal interest is almost nothing when it comes to professional selection. I once learned that one of my classmates took the initiative to transfer from the medical specialty to the nursing specialty. The reason was to find a job better, but I did not want more people to pay attention to her behavior. It can be seen that most of the students entering the nursing specialty are passive choices. The goal after professional selection is to meet their own physical and security needs, rather than the developmental needs of respect, social status, or self-realization. Therefore, it is understandable that the development of innovative exploration in the professional field is not strong.

#### **3.2. Dependency of Professional Status (Professional Characteristics)**

“The doctor opened his mouth and the nurse broke the leg.” This is the voice of many clinical nurses. In many people's view, the "gold content" of nursing work techniques is not high. They only do trivial things such as giving injections, dispensing drugs, and helping patients turn over. They do not need advanced knowledge. In the process of treating patients, nurses are just doctors. The assistant, the doctor's role is the most important. In clinical work, the status of the status attribute makes many nurses accustomed to their own mechanical execution of medical behavior, but questioned the feasibility of the behavior of their own innovation. Numerous innovative approaches to care must first clarify whether their research topics or areas are beyond the scope of care before starting. Consider whether there may be violations beyond the scope of the right and then carry out innovative research. It is very easy for the idea of a flash to fade in the tangled situation. This is true of nursing science and research workers, not to mention nursing personnel who are engaged in busy work in the clinic.

#### **3.3. Questionnaire Design**

Questionnaire survey is a basic and commonly used research method to search information through the distribution and recovery of the questionnaire. For the purpose of this study, based on

Johnson's language learning cognition and presentation questionnaire, the questionnaire of this paper is formulated. After revision and preliminary test, the questionnaire is determined to be the formal questionnaire supporting this paper. The questionnaire was distributed to 250 college students and 50 teachers with the title of "ladder training of nursing undergraduates' professional ability and innovation ability". 300 questionnaires were distributed and 295 valid questionnaires were collected, with an effective rate of 98.3%.

### 3.4. Reliability Test of Questionnaire

In order to test the reliability and stability of the questionnaire, the variance of the questionnaire results was first calculated, and then the reliability of the returned questionnaire was tested by the method of "half-half reliability" test. Using formula (1) to calculate the reliability coefficient, the correlation coefficient of the questionnaire is  $r=0.883$ . According to the theories and methods of modern scientific research, when the reliability of a test reaches 0.80 or more, it can be regarded as a test with higher reliability. The test results confirm that the questionnaire is reliable.

$$S^2 = \frac{(M - X_1)^2 + (M - X_2)^2 + (M - X_3)^2 + \dots + (M - X_n)^2}{n} \quad (1)$$

$$r = 1 - S^2(1 - r_1) / S_n^2 \quad (2)$$

$$r = \frac{2r_{ban}}{1 + r_{ban}} \quad (3)$$

## 4. The Nursing Students Undergraduates Innovation Ability Ladder Mode Construction

The cultivation of innovation ability of nursing undergraduates mainly has three modes as shown in Figure 1

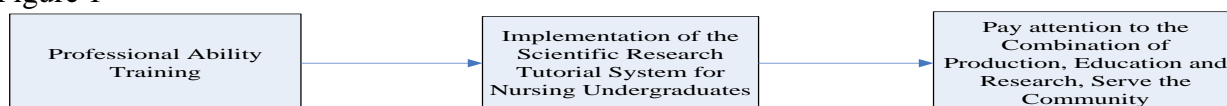


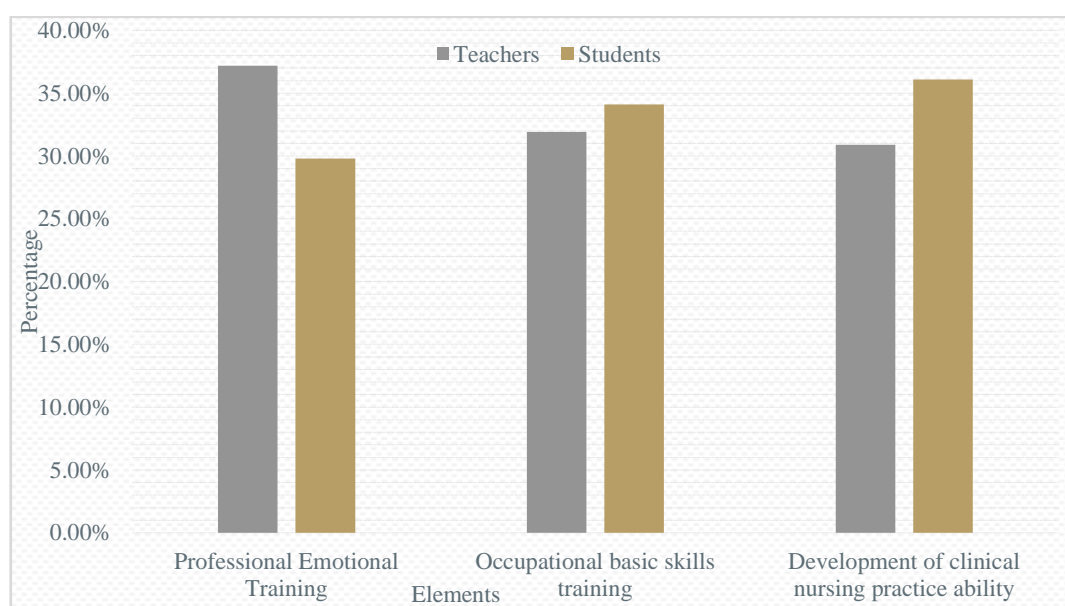
Figure 1. The nursing student's undergraduate's innovation ability ladder mode

### 4.1. Professional Ability Training

Including occupational emotions, occupational basic skills, clinical nursing practice ability, three ladder-like ability training modules, mainly practicing the concept of "learn from doing", through curriculum integration, "multi-situation-integration of practical training" teaching, and more Integration of disciplines, internships, pre-job training, and other teaching reforms. As can be seen from table 1 and Figure 2, the teachers and students of the two universities believe that the cultivation of professional ability mainly includes professional emotional training, basic vocational skills training and clinical nursing practice ability.

Table 1. Elements of professional ability training

	Teachers	Students
Professional Emotional Training	37.2%	29.8%
Occupational basic skills training	31.9%	34.1%
Development of clinical nursing practice ability	30.9%	36.1%



*Figure 2. Elements of professional ability training*

### (1) Professional Emotional Training

Completed in the first academic year, mainly through nursing humanistic literacy training and early contact with clinical care. An innovative and feature-based curriculum that integrates ethical, aesthetic, and interpersonal knowledge and organically combines with the nursing profession. In the teaching of nursing humanistic courses, we pay attention to both practical teaching and theoretical teaching, use scene-based interpersonal communication training and other methods to conduct situational teaching, and conduct nursing etiquette contests around the 5.12 International Nurses' Day, while also using socialized nursing practices outside school. Base, extensively carry out nursing humanities and social practice activities, allowing students to learn to reflect personal good moral cultivation in social life, learn communication skills, build harmonious interpersonal relationships, learn to discover beauty and create beauty.

### (2) Occupational basic skills training

Completed in the second school year, mainly through nursing basic courses. The reform of practical teaching in internal medicine, first aid and geriatric nursing courses was carried out. Under the auspices of the "intelligent" nursing practice base in the school, students use open, interactive context simulation environments to carry out efficient and safe practice operations to complete the mutual penetration of basic nursing and clinical nursing knowledge and skills, and to cultivate the undergraduate ability to learn Self-learning ability.

### (3) Development of clinical nursing practice ability

It was completed in the 3rd and 4th academic year, mainly through clinical internships, including reflective nursing practice and nursing practice of the bed-bed responsibility system. Reflective nursing practice runs through the entire internship process. Through the writing of a reflective diary, students continue to develop problems in their discoveries and their ability to analyze and solve problems, and cultivate their critical thinking. For the students in the post-internship period, the bed-responsibility system is used as a nursing practice. Under the guidance of the teacher, each intern student is responsible for the admission assessment, doctor's advice, perioperative nursing, rehabilitation exercises, and health education of 2-3 mild patients. Nursing work, 8 hours to go to work, 24 hours responsibility system. The students take care of the fixed bed every day, check the room of the same patient, observe the condition of the patient, and take care of the patient so that

the student can truly integrate into the role of the nurse. It is conducive to the communication and trust between the students and the patient, and enhances the sense of professional honor.

#### **4.2. Implementation of the Scientific Research Tutorial System for Nursing Undergraduates**

Undergraduate research and mentoring system is one of the implementation plans of the multi-level undergraduate tutoring system. It mainly uses the mentor's scientific research ability, academic level, and scientific research projects to conduct academic and moral education for undergraduates. Through the formulation of the "Guidance Method for the Tutorial System for Nursing Undergraduates", the document provides detailed explanations on the qualifications of instructors, appointments, mentors' responsibilities, work methods, and assessments. The tutorial system is implemented from the first grade and runs through the full 4-year program. After the freshman arrives at school, the counselor distributes the student equally to the tutor. The tutor actively guides students to participate in scientific research according to their interest. In the process of student participation in scientific research, students' practical ability is trained, students' spirit of innovation is cultivated, and students' good moral qualities are shaped so that the combination of education and scientific research can be realized.

#### **4.3. Pay attention to the Combination of Production, Education and Research, Serve the Community**

The scientific research results will be used in undergraduate nursing teaching and clinical practice, so that scientific research projects, teaching, and practice will form an effective mechanism for flexible transformation and mutual promotion. On the one hand, teachers apply the research results to everyday teaching methods and models, such as the research of the "reflective" nursing practice training model, the construction of the nursing practice teaching model based on the "care professional development record" and the results of implementation projects. Applied to professional practice teaching, it has cultivated students' critical thinking ability. On the other hand, the students are organized to carry out the "three rural" professional health service activities. Students concentrate in remote rural areas in the summer to provide the people with the necessary health services. The service-oriented practice base encourages students to apply what they have learned to directly serve the masses, and at the same time provides valuable practical places for innovation and entrepreneurship issues for college students.

### **5. Conclusion**

Innovation is the soul of a nation and an inexhaustible motive force for a country to thrive. For nursing undergraduate higher education, the small innovative ability of nursing students affects the employment of students, while the major affects the development of nursing careers and the construction of innovative countries. In addition to innovative thinking, there are innovation basic knowledge, innovative personality and innovative practice. This article analyzes the constituent elements of innovative ability of nursing undergraduate students, provides targeted theoretical guidance for the cultivation of nursing students' innovative ability, so that we can take a good path of innovation in nursing education and promote the development of nursing career.

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## Data Availability

Data sharing is not applicable to this article as no new data were created or analysed in this study.

## Conflict of Interest

The author states that this article has no conflict of interest.

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