

## Study on collaborative education mode of nursing specialty in school from the perspective of combination of production and education

Xiaojing Wang\*, Jingjing Yang

School of Medical Nursing, Jiyuan Vocational and Technical College, Jiyuan, 459000, China

wangxiaojing0020@163.com, yjj18300708950@163.com

\*Corresponding author

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**Abstract:** As China's economic and social development enters a new normal, the aging population intensifies and the new urbanization accelerates, the supply-side structural reform further releases the multi-level and diversified health needs of the masses. It is a new task to accelerate the development of nursing service and closely link the connotation of nursing service with the health needs of the masses, which is to promote the transformation of economic structure, expand social employment and improve the health level of the masses. In order to solve the employment pressure of graduates and help students get better development in the future, many school have made innovations and reforms in talent training mode, especially in the context of "double high" construction. The combination of production and education and enterprise cooperation cooperation are the important ways and key points of innovation and reform in school. The integration of industry and education and the cooperation between schools and enterprises are the inevitable way for the development of vocational colleges. To promote the development of vocational education and enhance the competitiveness of vocational colleges, it is necessary to actively build and innovate the collaborative education mechanism. This study takes the reform of nursing teaching in medical colleges as the starting point, and on the basis of in-depth research in teaching hospitals, points out that nursing collaborative education should attach importance to the promotion of medical and educational collaboration, clarify the training objectives of practical nursing talents, strengthen the construction of teaching staff, and promote the reform of teaching mode.

### 1. Introduction

After experiencing the rapid expansion of the scale of extension, vocational school education has entered a period of connotative growth to improve the quality of vocational education. The development focus of this period is to improve the quality of vocational education [1]. The school-running mode of vocational education in China has roughly experienced four stages: enterprise, industry, government and multi-agent. In the four stages of development, the participation of enterprises and industries in education is indispensable. The integration of industry and education and enterprise cooperation cooperation has become the key to the high-quality development of vocational education, and also the key content of the current reform of vocational school education in China. It is also the main choice for the teaching work of school to transform from scale development to connotation development [2]. Under the background of the new economic structure, different industries in China are constantly undergoing transformation and upgrading, and all kinds of enterprises present new business models. Enterprises constantly adopt new technologies and management methods in the process of production and operation, and the use of new technologies urgently requires all kinds of school to continuously improve their talent training models [3]. Nursing serves the whole process of people's birth, aging, illness and death, and plays an important role in meeting the overall physical, psychological and social needs of the masses. This puts high demands on nursing technology, and naturally puts new demands on the training of nursing staff [4]. Strengthen humanistic education and professional quality education of nursing specialty, strengthen

clinical practice teaching, and pay attention to the cultivation of professional ethics, innovative spirit and nursing practice ability. Strengthen the capacity building of teachers and clinical practice teaching bases [5]. "

In recent years, although the nursing industry in China has greatly improved, there is a big gap with the development of the whole medical industry. Therefore, it is urgent to explore the improvement measures by studying the current situation of clinical practice teaching in vocational school nursing specialty [6]. At present, vocational colleges all over the country have strengthened the research on the education model of industry-education integration in the context of the new era. In the perspective of industry-education integration, they have actively cooperated with enterprises to develop plans and programs for collaborative education. For this reason, school have also cultivated a large number of high-quality skilled talents to adapt to social and economic development, industry needs and job requirements [7]. But at the same time, many school still have some problems in the enterprise cooperation collaborative education mode, such as imperfect cooperation mechanism and low enterprise participation. At present, the state has provided a good development platform for school from the policy and institutional level, the theoretical level and the practical level. It plans the vocational school education and industrial development simultaneously, and takes the cooperation between industry and vocational education as an effective means to improve the quality of workers, promote the optimization and upgrading of industry, and enhance the core competitiveness of enterprises, and promote the in-depth integration of industry and education [8].

In this study, nursing students and teaching teachers in school are taken as the research objects, and the practical teaching problems of nursing specialty in school are discussed. The theory and operation mechanism of teaching system are analyzed from the aspects of practical curriculum setting, practical teaching methods, teaching methods, practical teaching conditions, teaching resources and practical teaching evaluation, so as to provide theoretical support for perfecting practical teaching of teaching system.

## **2. Collaborative education mode of nursing specialty in vocational school education**

### **2.1. Developing enterprise cooperation collaborative education mode is the only way for vocational school education**

The integration of industry and education is an important direction to achieve the high-quality development of vocational school education. To achieve the integration of industry and education, we must attach importance to and develop enterprise cooperation cooperation, which is also the only way for the "double high" construction, education development and innovation of school [9]. In the context of the new era, higher requirements are also put forward for vocational education. What vocational education should do is not only to cultivate talents with professional knowledge and skills, but also to cultivate professional talents with innovation, creativity and entrepreneurship. In order to meet this development demand, it is necessary to strengthen enterprise cooperation cooperation. "Production" in the combination of production and education can be understood as "production" or "learning to do", which is an important form of practical education; "Teaching" refers to educational teaching, which generally refers to practical teaching activities and contents; "Integration" is the requirement for the interaction between the two. It is the organic combination of "productive learning" and "learning production", "productive teaching" and "teaching production", which is the fundamental requirement for the combination of theory and practice [10]. The combination of "production" and "teaching" is based on the internal relationship between the two, which is reflected in the connection between professionalism and productivity, professional core competence and professional production technology in vocational education. This is the regulation of the content and direction of "production" and "teaching".

At the beginning of nursing students' enrollment, clinical nursing experts were invited to participate in freshmen's enrollment education, introducing the nature of nursing work, the requirements of nursing post ability and quality, and the latest development trends of nursing

industry. Organize students to enter the practice bases inside and outside the school, such as Guotai Sunshine Nursing Home, Teaching Hospital, etc. every week, and observe the service objects and working environment from multiple levels and perspectives, so that nursing students can feel the professional atmosphere and stimulate their curiosity in the process of early clinical contact, and form a perceptual understanding of the nursing profession of the elderly. On this basis, guide students to make learning plans and actively implement them, so that students can master the basic professional knowledge necessary for engaging in this major. Our hospital adopted the self-designed "market demand questionnaire for nursing professionals" to carry out post surveys in more than 30 hospitals and elderly care institutions both inside and outside the province, analyze the typical work tasks of clinical nursing posts and elderly care specialist posts, effectively integrate knowledge, ability and quality, and determine talent training objectives and specifications. On the basis of the original nursing professional curriculum system, According to the principle of progressive post ability (nurse → clinical nurse → senior nursing specialist nurse), progressive teaching content (basic medical course → clinical nursing course → specialized nursing course), and progressive teaching organization form (simulation in school → practical training in post planning → clinical practice), three course modules of "basic quality course module, licensed nurse course module, and quality development course module" were determined. The relevant teaching contents of the senior nursing specialty post, such as the physical characteristics of the elderly, the psychological characteristics of the elderly, home care, chronic disease care, hospice care and so on, are embedded into the corresponding courses of the above three modules in the form of "fragmentation" to form the "embedded" senior nursing specialty curriculum system.

As an important part of socialist education, vocational school education must have clear political attributes, and principals must have high ideological and political literacy and firm political stance to lead the development direction of vocational colleges. At the same time, the principal responsibility system can improve the principal's sense of responsibility, carefully handle various problems in enterprise cooperation cooperation, and avoid capital manipulation of education. Implement the leadership system of the board of directors, arrange enterprise personnel and industry personnel to join the board of directors, and jointly make resolutions on major issues such as major business activity plans, college department management, and fund raising, so as to create conditions for enterprises and industries to participate in education. Therefore, when vocational school education carries out the innovation of educational mechanism, it can learn from and learn from the school-running management mode of industrial college, and carry out the innovation and construction of collaborative educational mechanism.

## **2.2. The Fundamental Way of Collaborative Education**

The adjustment and upgrading of economic and industrial structure will affect the demand of labor resources, and the change of labor resources will further affect the change of professional structure of school. Specialty is the basic unit for school to connect and serve the society. Scientific planning and optimization of specialty layout is the basis for the development of school and the combination of production and education in school. Under the mode of collaborative education between schools and enterprises, schools and enterprises can jointly formulate a realistic talent training plan based on industrial development, which will be closer to students' employment needs and development needs. Moreover, the open practical teaching environment of enterprises is more conducive to students' transformation of theoretical knowledge into practical skills, and to students' cultivation of professional quality. These can lay a good foundation for students' future employment, thus improving the employment quality of graduates of school. This can not only stimulate the vitality of secondary colleges, but also help to achieve enterprise cooperation cooperation and integration of industry and education. The teaching mode required by enterprise cooperation cooperation and industry-teaching integration is different from the traditional teaching mode, mainly through the modern apprenticeship system to achieve talent training.

Enterprises need to participate in education in the whole process and in all aspects. If they do not delegate their autonomy and let enterprises and industries participate in the whole process of talent

selection, education and employment, the advantages of enterprise cooperation cooperation will be difficult to fully play out. Practical teaching is an important part of the teaching of nursing specialty, and an important link in training nursing students to integrate theory with practice, improve their comprehensive ability, and realize the transformation of knowledge and skills. The quality of practical teaching will directly affect the overall effect of nursing teaching and the comprehensive quality of graduates. Through the development of practical comprehensive projects in cooperation with medical institutions such as Cathay Pacific Sunshine Home Resort, our hospital has designed four training modules: basic nursing skills, nursing skills for common diseases of the elderly, nursing skills for rehabilitation of the elderly, and community nursing skills, completed the development of 70 training projects and 12 comprehensive training projects, and formulated the "assessment standard for random examination of nursing students' skills". We will vigorously promote the reform of teaching modes such as "flip classroom" and form an open "networked classroom". On this basis, we will gradually expand the application of information technology in daily teaching and special management, actively explore new modes of professional management information, realize professional teaching and management information, extend nursing teaching from traditional classroom to extracurricular, break the time and space restrictions of teacher-student communication and interaction, and enable students to rely on cyberspace for autonomous learning and lifelong learning. It has improved the quality of teaching and promoted the sustainable development of students. At present, the personal space ownership rate of teachers and students is over 95%, with 12 space courses, more than 95,000 uploaded resources and more than 850,000 interactive exchanges.

### **3. Collaborative education mode of nursing specialty in school from the perspective of combination of production and education**

#### **3.1. The post ability has been improved, but the competitive advantage in employment has not been highlighted**

Under the cooperative training mode of medical education, the nursing professional courses in the second academic year are opened in the hospital, and are taught by experienced medical and nursing personnel. Students are integrated into the hospital environment, directly contacted with the clinic, combined the learning content with the job tasks, and developed the post abilities of clinical thinking, on-site communication, emergency treatment, team cooperation and humanistic care, so as to realize the seamless connection between learning and work. From the statistical data, there are certain differences between the subjective evaluation of students and medical staff. The medical staff have a consistent positive attitude towards the collaborative training mode of medical education, and their overall satisfaction is very high; 84.97% of the students think that the reform of training mode is necessary, but only 65.57% are satisfied with the training effect; In terms of participating in the co-training of medical education again, 70.69% of the students chose to be willing, and 29.31% chose not to be willing or indifferent. Through interviews, the investigation team learned that some students have problems such as vague cognition of the cooperative training mode of medical education, maladaptation to the hospital teaching environment and methods, and strong dependence psychology.

Taking the training objectives as a reference, both schools and colleges believe that students still have some problems, such as lack of professional knowledge, poor connection between theory and operation, unclear self-cognition, and high orientation. It can be seen that the theoretical teaching effect in the training process is not good, and the guidance to students' learning process needs to be strengthened. Employment is an intuitive reflection of the society's recognition of graduates' ability. In the survey, 34.66% of the students in the research group think that they have a slight advantage in the process of finding a job compared with the control group, and 43.75% think that they have no advantage. Judging from the employment rate of two graduates, the employment advantage of students in the research group is not prominent, which is not much different from that in the control group. As shown in Table 1.

Table 1 Comparison of Employment Rates between the Two Groups (%)

Group	Class of 2017		Class of 2018	
	Initial employment rate	Year-end graduation rate	Initial employment rate	Year-end graduation rate
Research group	84.44	93.65	90.22	97.86
Control group	89.65	96.25	85.79	99.22

In order to further understand the teaching effect, the investigation team counted the scores of professional courses and the passing rate of nursing examination in the second academic year of the two groups, and made a comparative analysis. The results are shown in Table 2.

Table 2 Comparison of examination results and passing rate of nursing examination between two groups of professional courses

Group	Class of 2017			Class of 2018		
	Average score	Per capita failure rate	Pass rate of nursing examination	Average score	Per capita failure rate	Pass rate of nursing examination
Research group	74.25	35.88	87.95	44.30	36.28	100.00
Control group	72.63	39.28	87.68	75.20	22.26	98.37

From Table 2, the average score of the students in the research group in the professional courses is slightly higher than that in the control group, but it does not have a significant advantage in the per capita failure rate and the passing rate of the nursing examination. The research team conducted a survey on the curriculum and the teaching effectiveness of teachers, and found that there were many problems in teachers' teaching. In terms of teaching mode innovation, it is mainly to create a modern apprenticeship teaching mode that integrates theory with practice and integrates industry with education, so that enterprises and industries can participate in the innovation of teaching mode. Make full use of the educational resources of enterprises and industries, especially the practical resources and teachers resources, to improve the quality of talent training in vocational education. For a long time, vocational education cannot be optimized due to the limited educational resources and teachers in practical teaching, but these are the advantages of enterprises and industries, and the advantages of enterprise cooperation cooperation are also mainly reflected in this.

### 3.2. Pay attention to the collaborative publicity of medical education and improve students' recognition

This survey found that the students in the research group have a certain understanding of the collaborative training mode of medical education, but it is superficial and only stays on the surface. Before the participation, most students knew little about the cooperation between medical education and teaching, and the significance of the reform of talent training mode was unclear, and they did not have a sense of identity with this mode from the heart; After participation, due to the lack of proper communication and guidance, maladjustment, passive learning, unclear self-orientation, lack of thinking about what to learn and how to learn, and the learning effect is greatly reduced. From the interviews with teaching teachers, it is found that there is a lack of professional teachers in practical teaching in school. Due to the particularity of nursing specialty, higher requirements are put forward for teachers' clinical practice. However, due to the restrictions of relevant personnel systems, some vocational schools have some difficulties in hiring clinical nursing practical teachers, and they are generally substitute teachers. Although these teaching teachers have rich practical experience, there are still some gaps with professional teachers in teaching, which will easily lead to a certain degree of teaching effect of nursing practical courses. Moreover, the hiring of substitute teachers can easily lead to the great mobility of teaching staff in school, which is not conducive to the management of teachers in schools. Therefore, it is easy to cause some students to lack

enthusiasm for clinical practice learning with teaching system, mistakenly think that bedside teaching is a waste of time and useless work, and prefer to bury themselves in reciting the examination contents.

In the middle of clinical practice teaching, the main task of teaching is to enable students to carry out specialized and special nursing according to the professional requirements of each department for nursing, and to independently complete nursing work in the process of clinical practice. Intern nursing students should be autonomous in groups, implement the team leader responsibility system, and the team leader can take turns to exercise the organization and management ability of students. The tasks of the team leader mainly include: conveying the relevant regulations issued by the nursing department to the team members in a timely manner; Hold a group meeting once a week to understand the learning and living conditions of the group members and report them to the Nursing Department; Inform the team members of the time and place of each meeting, lecture and other practical activities in time to ensure that the practical activities can be carried out smoothly; Operation delivery.

#### **4. Conclusions**

Vocational school colleges are an important position to cultivate high-quality technical and technical talents. The professional talents trained by school need not only to meet the needs of the specialty, but also to meet the needs of social development, industry development and post specialty. The release of the new professional catalogue of the Ministry of Education has put forward new requirements for the quality and ability of traditional accounting professionals. New technologies such as big data, industry-finance integration and financial sharing will be combined with traditional accounting knowledge and become the content of talent training of accounting professionals. At the critical moment of the development of vocational school education, school should seize the opportunity, deepen the reform of education and teaching, actively cooperate with industries and enterprises according to the characteristics and trends of local economic and social development, adjust professional settings according to market demand, implement the combination of production and education in all aspects of professional construction, enhance the social adaptability of schools, and cultivate high-quality technical and technical talents that really meet the needs of social and economic development. Under this background, it is the trend of vocational education development to promote in-depth cooperation between schools and enterprises and to build a teaching mode of combination of production and education. At the same time, it is also necessary to innovate the mechanism of school management mode and talent training mode by trying secondary colleges, so as to accumulate experience for the transformation of vocational education.

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