

Research on Strategies for Constructing a Teaching System for Higher Vocational Nursing Majors from the Perspective of School-Enterprise Cooperation

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Abstract: With the rapid development of modern medicine and the growing emphasis on public health, higher demands are being placed on the quality of nursing education and personnel training. To align with current trends in talent needs, higher vocational colleges must actively reform their nursing education training models to cultivate nursing professionals who meet societal demands. This paper explores strategies for constructing a nursing teaching system in higher vocational colleges from the perspective of school-enterprise cooperation, offering insights for reference.

Keywords: School-enterprise cooperation; Higher vocational nursing; Teaching system; Construction strategy

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1. Introduction

The teaching system serves as the foundation for training nursing professionals in higher vocational colleges. Its construction must address the practical needs of nursing talent cultivation while continuously optimizing the curriculum system to enhance teaching quality. School-enterprise cooperation is a vital approach to cultivating skilled professionals in higher vocational education, as it contributes to the improvement of students' professional skills and overall competencies. Therefore, in the context of nursing education in higher vocational colleges, it is essential to enhance school-enterprise cooperation, actively develop a teaching system that integrates this collaboration, and improve the quality of nursing education and talent cultivation. By building a curriculum system that emphasizes school-enterprise cooperation and collaborative education, these institutions can elevate the teaching standards and outcomes for nursing programs ^[1].

2. Significance of constructing a teaching system for higher vocational nursing majors from the perspective of school-enterprise cooperation

School-enterprise cooperation represents a model where enterprises actively participate in higher vocational nursing education. This collaboration requires aligning production services with educational processes, enabling students to acquire practical job skills and address the shortcomings of traditional education methods.

2.1. Improving the quality of nursing education

With the continuous improvement of public health awareness, expectations for medical standards and nursing service quality are rising. However, there are notable shortcomings in the current training of nursing talent in higher vocational colleges. For instance, the reliance on traditional, single-dimensional training approaches results in graduates with limited practical abilities, making it difficult for them to meet industry demands. The optimization and reform of nursing education training models through school-enterprise cooperation can diversify talent cultivation methods. This approach allows higher vocational colleges to train nursing professionals with a clear focus on industry needs, producing high-quality graduates who possess both theoretical knowledge and practical skills ^[2]. Consequently, these reforms not only improve the professional competency of nursing teams but also enhance the overall quality of nursing education in vocational colleges.

2.2. Laying the foundation for the development of nursing majors

In the current context of societal development, nursing is not only a crucial component of medical and healthcare education but also a rapidly evolving professional field in higher vocational education. Compared to more established disciplines, the training objectives and directions for nursing education remain somewhat ambiguous. By adopting school-enterprise cooperation as a reform pathway, vocational colleges can refine and optimize their talent training models, clarifying the objectives and directions of nursing education programs. This clarity improves the overall quality of nursing education and lays a solid foundation for the future development of nursing as a professional discipline.

2.3. Aligning education with job market needs

Currently, the supply of nursing professionals in China falls short of industry requirements. The talent structure lacks balance, and the graduates produced by vocational colleges do not fully meet market demands. Through strengthened school-enterprise cooperation, diverse organizations, including large and small hospitals, can integrate their talent requirements into educational planning. This collaboration helps vocational colleges adjust their training programs, develop specialized courses, and organize practical training and internship activities. As a result, nursing graduates are better equipped to meet industry and job-specific needs, addressing the current gap between education and employment ^[3].

3. Construction of a nursing teaching system in higher vocational colleges

3.1. Lagging educational resources

With the widespread application of modern educational technology, higher vocational colleges need to utilize such technologies to gather cutting-edge knowledge and innovations, organize and curate educational resources, and promptly share the latest nursing information with students. This approach can effectively enhance students' comprehensive skills and contribute to the sustainable development of the healthcare

industry ^[4]. However, in practice, many higher vocational colleges, despite advocating the use of modern technology, are constrained by traditional educational concepts. Consequently, the textbooks and nursing teaching cases they use are often outdated, making it difficult for students to update their knowledge systems in a timely manner. This situation hampers the improvement of the quality of nursing education and talent cultivation.

3.2. Traditional and unitary teaching modes

At present, some higher vocational colleges still adhere to conventional, single-mode approaches to talent cultivation. These rely heavily on theoretical instruction while neglecting the development of students' comprehensive practical skills. Not only are the teaching methods insufficiently innovative, but they also fail to integrate theoretical and practical teaching organically. Students often have to wait until after graduation to begin hospital internships, missing opportunities for early practical experience ^[5]. The absence of modern teaching methods results in a monotonous training atmosphere, making it difficult to fully engage students and stimulate their enthusiasm. This limitation adversely affects the development of their skills and restricts improvements in the quality of nursing talent training.

3.3. Insufficient modern experimental and practical training equipment

Experimental and practical training is a crucial component in nursing education, enabling students to internalize professional knowledge and significantly enhance their nursing skills. However, the upgrading of experimental and practical training equipment in many higher vocational colleges is insufficient, with the renewal of large-scale modern equipment lagging behind. Furthermore, existing campus networks are often inadequate to meet the computational demands of modern equipment ^[6]. These shortcomings hinder the quality of practical training and experimental teaching, making it difficult to cultivate the high-quality talents required by the healthcare industry.

3.4. Failure to build a school-enterprise cooperative education model

At present, school-enterprise cooperation in higher vocational education is primarily reflected in practical teaching. The typical approach involves schools and enterprises signing agreements to jointly establish training bases with clear divisions of responsibilities: enterprises provide training venues for students, while schools supply enterprises with human resources. However, this fixed and traditional cooperation model often limits enterprises from fully engaging in talent cultivation alongside vocational colleges. Even when collaboration exists, it is generally restricted to talent selection, with enterprises rarely taking the initiative to participate in educational activities. Such superficial cooperation fails to promote the sustainable development of enterprises and does little to enhance the quality of talent cultivation in schools, hindering the long-term growth of students ^[7]. To address these issues, higher vocational colleges and enterprises need to develop a robust school-enterprise cooperative education model that deepens collaboration and establishes a strong foundation for improving the quality of nursing talent cultivation in higher vocational education.

4. Types of school-enterprise cooperation in higher vocational nursing education

4.1. School-enterprise cooperation based on “2+1” model

The “2+1” model represents a school-enterprise cooperation framework where students spend two years in

school and one year in hospitals. This approach emphasizes practical teaching activities, with both schools and enterprises organizing hands-on training and experimental activities. During their hospital internships, students follow instructors and participate in clinical practice tasks. Under this model, the curriculum integrates work and study by aligning in-school and on-site teaching content ^[8]. Currently, many higher vocational colleges in China have established stable partnerships with local hospitals. These collaborations provide opportunities for faculty to receive clinical training and for students to gain practical experience in real-world settings.

4.2. University-enterprise co-construction of specialties

In this model, schools and enterprises collaborate to create an environment conducive to talent development. First, schools can establish partnerships with various medical service institutions based on different career development needs. Students may be organized to train in hospital departments such as emergency rooms and intensive care units. By aligning with the vocational characteristics of nursing roles, schools can work with nursing services and medical institutions to design tailored talent training and output programs. Second, schools and enterprise personnel can jointly conduct comprehensive assessments of students' performance during their institutional practice. These assessments evaluate students' skill levels, and those who meet the required standards receive certification provided by the school. This co-construction approach enables students to acquire practical skills and professional certifications, fostering well-rounded nursing professionals ready for the workforce ^[9].

4.3. School-enterprise deep cooperation model

In-depth cooperation between schools and enterprises involves multiple levels. First, there is joint training, where schools send nursing students to various medical institutions, and enterprises organize students' practical activities in line with curriculum requirements. Second, there is discipline integration, where, based on the duration and nature of higher vocational education, schools and enterprises collaboratively plan professional disciplines, develop teaching materials, assign instructors, and innovate teaching models ^[10]. Third, school-enterprise technology exchange and sharing take place, where personnel from medical institutions and school teachers communicate, jointly guide students, and offer training services for both students and faculty. Fourth, students enter medical institutions for internships.

4.4. Order-type training model

Based on the actual demands of the job, the enterprise provides training quotas and standards to the school, defining the obligations and rights of both parties through a signed agreement. In terms of cooperation, both parties jointly develop the personnel training plan, design professional course content, and plan the teaching syllabus. In terms of assessment and employment, the school and enterprise will establish assessment standards, and students who meet the criteria can receive job recommendations from the enterprise.

5. Strategies for constructing the vocational nursing teaching system from the perspective of school-enterprise cooperation

5.1. Establishing an in-depth school-enterprise cooperation mechanism and reconstructing the talent training program

School-enterprise cooperation is a deep educational model that integrates work and study. Schools and

enterprises collaborate to establish industrial colleges, where school teachers and enterprise personnel guide students through learning and practical experience in a modern apprenticeship format. In nursing education, schools should create a school-enterprise cooperation platform with enterprises, holding regular discussions and meetings to synchronize nursing job needs, post standards, and work content in each enterprise. Together, they will formulate modern apprenticeship training programs and produce diverse apprentices according to the characteristics of the medical industry, while developing a unified training plan.

Initially, based on local community medical service needs, schools can collaborate with community medical institutions, sign agreements with multiple (chain) community institutions, and flexibly adopt talent training models such as 4+1 or 3+2. This allows students to complete school learning tasks for 3–4 days while spending 1–2 days in enterprise work. Additionally, based on the needs of cross-regional medical service institutions, schools and institutions can implement a work-study alternating model, where students engage in practical activities for 2–3 months during winter and summer vacations. Furthermore, to strengthen students' vocational abilities, schools and enterprises should clarify the core competencies required in the nursing profession and incorporate them into the talent training program, laying a solid foundation for students' future professional development and job placement ^[11].

5.2. Comprehensively coordinating school-enterprise resources for joint construction and sharing

In-depth cooperation between schools and enterprises should extend beyond agreements and personnel training programs to encompass tangible collaboration in training facilities, equipment, and teaching staff. First, schools and enterprises can utilize holidays to provide students with practical opportunities, allowing them to engage in typical nursing tasks and participate in treatment, rehabilitation, and nursing activities. This enables students to gain expertise in integrated treatment and nursing practices combining Chinese and Western medicine, psychology, nutrition, and other areas, making the practical content more multidimensional. Furthermore, teaching reforms emphasizing “curriculum integration” should be conducted in alignment with nursing job requirements.

Second, emphasis should be placed on the sharing of equipment resources between schools and enterprises. Both parties can introduce advanced nursing technologies from home and abroad, establish relevant professional disciplines, and define rules and schedules for the use of enterprise equipment. Adjusting the ratio of productive practice teaching can also promote the integration of practical learning and teaching while aligning instruction with research.

Additionally, schools and enterprises should establish an exchange system for expert instructors. This system would provide school teachers with opportunities for temporary training and allow enterprise technical experts to mentor students. At the implementation level, schools and enterprises can collaborate on teaching facilities and materials, assigning school teachers and enterprise experts to jointly guide students in an apprenticeship model ^[12]. During this guidance process, mentors can create loose-leaf teaching materials tailored to real job scenarios, with a focus on local practices, emergency care, safety education, and vocational skills. These materials help students quickly grasp job standards and practical skills, enhancing their readiness for the workplace.

5.3. Deepening school-enterprise cooperative teaching with multi-scenario methods

Given the unique characteristics of nursing programs, schools and enterprises can break away from traditional

classroom teaching methods by prioritizing practical skill development. Through team-based approaches, they can group students according to their learning habits and foundational knowledge and implement multi-scenario teaching activities tailored to each team.

Case scenario teaching method: This method involves integrating nursing course content with enterprise case scenarios provided through the school-enterprise cooperation platform. Using online teaching platforms, teachers can assign scenario-setting tasks to teams, who then collect materials and prepare role-specific items. During classroom activities, teams simulate their assigned roles based on their preparation, while other students ask questions, summarize key points, and evaluate the presented knowledge.

Scenario inquiry method: Teachers design teaching cases aligned with instructional objectives, integrating theoretical knowledge with practical tasks. Pre-class activities require students to explore and prepare, while in-class activities involve random group presentations, case analyses, and peer questioning to foster an inquiry-based environment. Teachers can address differing interpretations, providing targeted explanations and encouraging students to relate their learning to practical work. Enterprise practice sessions allow students to complete hands-on tasks by referencing these cases, further solidifying their understanding.

Online and offline multi-scenario activities: Schools can invite enterprise personnel to record nursing and rehabilitation videos, transforming them into clinical practice materials for students to study online. Additionally, the “Internet + Education” model can be used to conduct live-streamed and remote training sessions facilitated by school and enterprise mentors. These activities not only develop students’ vocational competencies but also bridge the gap between theoretical learning and practical application ^[13].

5.4. Promoting comprehensive school-enterprise integration to enhance students’ employment competitiveness

With the steady progress of vocational education reform, higher vocational colleges should proactively innovate their educational philosophies, recognize the critical role of school-enterprise cooperation in student development, and actively establish partnerships with relevant enterprises. By building a coordinated talent training model with multi-party participation, they can ensure collaborative efforts in talent cultivation and effectively enhance the quality of nursing education programs.

In the traditional approach to nursing education, the training methods were often singular and outdated, with limited involvement from other stakeholders. Additionally, the curriculum content was relatively backward, failing to reflect cutting-edge knowledge and skills in the nursing industry. Under such a system, graduates of higher vocational colleges struggled to gain a competitive edge in the job market.

To address these challenges, higher vocational colleges must actively foster school-enterprise cooperation by developing robust partnerships with local nursing institutions and enterprises. This involves integrating and utilizing high-quality resources from these enterprises and actively involving them in defining talent training objectives and content. Collaboratively, schools and enterprises can establish nursing professional standards, study innovative talent cultivation models, and align training programs with clinical post-competency requirements.

By implementing collaborative education through “school-enterprise cooperation,” colleges can incorporate clinical knowledge into curriculum design and strengthen teaching teams with clinical expertise. This alignment ensures that the interests of schools, hospitals, and enterprises remain consistent throughout the talent training process—from enrollment and training to employment placement. This comprehensive integration improves students’ overall quality and nurtures the high-caliber nursing professionals required by

the industry, ultimately driving the development of the nursing field ^[14].

6. Conclusion

To sum up, the school-enterprise cooperation model offers a robust platform for the professional growth and development of nursing talents. By deepening this model, higher vocational colleges can align with the needs of medical service enterprises and the nursing industry, stay abreast of industry trends, and promptly optimize educational programs. Specifically, through establishing comprehensive cooperation mechanisms, coordinating school-enterprise resources, implementing cooperative teaching models, and creating shared evaluation platforms, schools and enterprises can facilitate the seamless integration of theoretical learning and practical application for students ^[15]. This approach enhances students' professional competencies, social adaptability, and overall learning quality, ultimately cultivating nursing talents who meet societal and market demands.

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