

Research on the Construction Path and Practice of “Dual-Qualification and Dual-Competence” Teaching Teams in Higher Vocational Colleges—A Case Study of the Nursing Professional Teacher Team of Guangzhou Huanan Business College

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Abstract: Against the background of the in-depth reform of vocational education, the construction of “dual-qualification and dual-competence” teaching teams has become increasingly prominent as a core link to promote the in-depth development of industry-education integration and improve the quality of technical and skilled talent training. Due to its strong practical characteristics, the nursing major has higher requirements for teachers’ “dual-qualification and dual-competence” (systematic theoretical teaching ability and clinical practical operation ability). Taking the Innovation Team for Education and Teaching of Nursing Professional Group of Guangzhou Huanan Business College as the research object, this paper systematically analyzes the practical paths constructed by the team in the construction of “dual-qualification and dual-competence”, such as the “internal training and external introduction” teacher optimization mechanism, the “school-hospital collaboration” practical training platform, and the “quantitative + qualitative” evaluation system. It also deeply discusses the structural contradictions faced in the construction process and the breakthrough strategies. The purpose is to provide a referenceable and promotable practical model for the construction of teaching staff in higher vocational nursing majors and contribute to the high-quality development of vocational education.

Keywords: Higher vocational nursing; Dual-qualification and dual-competence; Teaching team; Industry-education integration

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1. Introduction

The National Vocational Education Reform Implementation Plan emphasizes the construction of a vocational education system supported by “dual-qualification” teachers, and proposes the construction of industry-

education integrated enterprises and high-level practical training bases to ensure the training of “dual-qualification” teachers^[1]. The construction of “dual-qualification” teacher teams relies on industry-education integration as an important carrier and is also an institutional innovation in the reform of modern higher vocational education^[2]. In 2019, the Ministry of Education issued the Construction Plan for Teachers’ Teaching Innovation Teams, initiating the construction of teachers’ innovation teams in vocational colleges^[3]. “Dual-qualification” teachers play a crucial role in promoting cooperation between the education field and the industry. They can accurately grasp the needs of enterprises and integrate the latest industry technologies and knowledge into the teaching process^[4].

Nursing is a branch of the medical field with strong practicality, and the quality of nursing education affects the level of medical care. Nursing teachers are required to have solid theoretical knowledge and rich clinical experience. “Dual-qualification and dual-competence” is a criterion for evaluating the competitiveness of teaching teams. Since 2022, Guangzhou Huanan Business College has implemented the project “Innovation Team for Education and Teaching of Nursing Professional Group”, focusing on the cultivation of “dual-qualification and dual-competence” and exploring a characteristic development path. The team has achieved remarkable results in teacher optimization, teaching quality improvement, and social service capabilities, providing a reference for other colleges and universities.

2. Core paths for the construction of “dual-qualification & dual-competence” teaching teams

2.1. Establishing a faculty optimization mechanism of “internal cultivation and external introduction”

The fundamental project for building a “dual-qualification & dual-competence” team lies in improving the structural quality of the faculty. The cultivation of teachers should cover professional ethics, professional knowledge, teaching methods, and practical services^[5]. Some scholars argue that teachers’ professional development involves three dimensions, knowledge, skills, and literacy^[6]. The nursing team of Guangzhou South China Business and Trade Vocational College has adopted an internal-external integration approach, further enhance the quality through internal cultivation and improving effectiveness through external introduction, and to build a sustainable faculty development model.

In terms of enhancing internal capabilities, the team focuses on strengthening clinical practical skills and strictly implements the system of teachers engaging in practical training at enterprises. During summer vacations and other periods, teachers go to school-enterprise cooperation units to participate in frontline clinical tasks, and produce outcomes such as Reports on Teachers’ Practical Training at Enterprises to ensure the traceability of practice and the evaluability of results. Through practice, teachers can master the latest clinical standards, technologies, and processes, and transform cutting-edge information into teaching materials. By the mid-term inspection of the project, 5 teachers including Jiang Jinxia have passed the assessment and been rated as 2024 “dual-qualification” teachers in Guangdong provincial vocational education, which demonstrates the effectiveness of the internal cultivation mechanism.

When introducing external talents, the team focuses on recruiting industry experts with senior professional titles and high skills, aiming to make up for the shortcomings in the teaching of specialized nursing fields. It has successively recruited experts with rich clinical experience, such as Associate Professors Fang Chuyu and Mi Yufen. Their profound practical accumulation in the field of specialized nursing not only enriches the content of practical teaching, but also promotes the improvement of the team’s clinical practical ability through the

“mentorship” model, injecting vitality of industry frontiers into the team.

2.2. Innovating a practical training platform of “school-hospital collaboration”

Practical platforms play a crucial role in connecting theoretical learning and practical operation, and are also key media for promoting the transformation of teachers’ “dual competences”. The mastery of technical skills is a process of gradual accumulation^[7]. By establishing internship bases through school-enterprise cooperation, the team has built a talent cultivation model that integrates teaching, practical training, and scientific research, further promoting the in-depth integration of school education and clinical practice.

The team has reached cooperation intentions with 40 medical institutions including Guangzhou Xinsi Hospital to jointly build practical education bases. Cooperative units provide cross-department internship opportunities for faculty and staff, and arrange senior clinical nursing supervisors or attending physicians as instructors to teach and evaluate teachers’ clinical skills. In addition, schools, hospitals, and enterprises have jointly developed a loose-leaf Nursing Practical Training Guide, which has become an important tool for promoting the dual improvement of teachers’ professional and teaching capabilities. Breaking through the limitations of traditional textbooks, this guide integrates the latest nursing standards of cooperative hospitals with the teaching needs of the school. Some core contents are co-compiled by clinical head nurses and full-time lecturers to ensure that it not only meets practical application requirements but also conforms to the standards of the education system, providing a standardized teaching platform for the development of teachers’ “dual competences”.

2.3. Establishing a “quantitative + qualitative” competence evaluation system

Establishing a reasonable and scientific evaluation system is particularly important for ensuring the quality of the “dual-qualification & dual-competence” education model. Evaluation criteria need to be both comprehensive and supported by scientific basis^[8]. When constructing an evaluation system for teachers’ innovation teams, it is necessary to take into account both professional backgrounds and team characteristics^[9]. This system aims to address the previous evaluation bias of emphasizing certificates over practical abilities, and builds a comprehensive assessment method around three dimensions to ensure fair and comprehensive evaluation. First, qualification certification, it confirms teachers’ basic qualifications for clinical practice based on rigid requirements such as nurse practitioner qualification certificates, years of clinical work experience, and training experience. Second, teaching transformation, through competitions such as curriculum presentations and clinical skills demonstrations, it measures teachers’ ability to transform clinical practice into teaching content, and tests their proficiency in integrating clinical cases and embedding industry standards into teaching. Third, social services, it refers to teachers’ achievements in participating in community nursing training, nurse practitioner qualification exam tutoring and more, to highlight the social significance of “dual-qualification & dual-competence”.

3. Construction achievements and phased outcomes

3.1. Significant optimization of faculty structure

After two years of efforts, the faculty structure of the team has achieved substantial improvement. The initial structure of “1 professor + 3 lecturers + 7 teaching assistants” has been optimized to “1 professor + 1 associate professor + 4 lecturers + 5 teaching assistants”. The proportion of “dual-qualified” teachers (teachers with both teaching and professional practical capabilities) has increased to 50%, among whom 3 teachers hold dual professional titles, meeting the dual standards of teaching ability and clinical skills. The overall quality of the

faculty has been significantly enhanced. Despite the increase in the proportion of “dual-qualified” teachers, the update of clinical practice is slow, and the mastery of new technical standards is insufficient, which has an impact on the timeliness of teaching^[10].

3.2. Continuous improvement of teaching quality

With the support of the “dual-qualified and dual-competent” faculty team, courses such as Fundamental Nursing for the nursing major have been developed on the Learning Pass platform. By integrating clinical cases and virtual simulation resources, the course satisfaction rate has reached 92%. In skill competitions, teachers of the team have won 2 national-level awards. Among them, the achievements in the clinical nursing operation skill competition have provided technical support for the hybrid teaching mode of “online virtual simulation + offline practical operation”. This mode solves the problems of “high risk, high consumption, and difficulty in repetition” in traditional practical training, and enhances the practicality and innovation of teaching.

3.3. Enhancement of social service capabilities

The “dual-qualified and dual-competent” faculty team has transformed their clinical experience into social service capabilities, realizing the integration of educational and social values. The team has carried out special tutoring for the National Nurse Qualification Examination, using clinical experience to analyze key and difficult points, which has enabled the first-time pass rate of nursing students in Grade 2021 to reach 71.4%. In addition, the team has organized 3 community health promotion activities and provided nursing skill training for nearby nursing homes, with a total service time exceeding 200 hours. These efforts have been widely praised by local residents, demonstrating the role of higher vocational nursing education in serving local medical and health undertakings.

4. Existing problems and breakthrough strategies

4.1. Major bottlenecks

4.1.1. Insufficient depth of practice

The corporate practice (hospital-based) of some teachers remains superficial. Due to the heavy workload of clinical work in hospitals and the poor matching between internship positions and actual needs, such practice often only focuses on the learning of basic nursing skills. It neglects the improvement of abilities in complex scenarios, such as emergency and critical care response and interdisciplinary collaboration. As a result, there is no significant improvement in their clinical operation capabilities.

4.1.2. Inadequate ability of scientific research transformation

When formulating development goals, most professional teacher teams in higher vocational colleges fail to effectively integrate the functions of teaching, scientific research, and social services, with a stronger emphasis on teaching^[11]. Although our team is in charge of two school-level teaching reform projects, there is a shortage of scientific research achievements based on clinical practice. Most studies only stay at the level of discussing teaching methods, lacking the ability to identify specific problems in clinical nursing practice and transform them into research topics. Consequently, a positive cycle of “practice-research-teaching” has not been formed.

4.2. Improvement paths

4.2.1. Establishing a flexible talent introduction mechanism

Strengthen school-enterprise cooperation by inviting experts from cooperative hospitals to serve as industrial

professors, who will participate in teaching through online lectures and offline guidance. Build a database of clinical physician mentors, assign clinical consultants to teachers, and improve teachers' ability to deal with complex medical scenarios through regular consultations and discussions. Special attention should be paid to young teachers in higher vocational colleges, providing them with policy, resource, and platform support to enhance their development capabilities^[12].

4.2.2. Enhancing scientific research capabilities

Conduct special training on scientific research projects transformed from clinical problems, invite experts to give lectures, and guide teachers to identify research topics from clinical practice to promote in-depth integration of scientific research and clinical practice. Adopt target management to scientifically allocate teaching and research tasks^[13]. Establish a mechanism for transforming scientific research achievements into teaching resources, converting scientific research results into teaching cases, and using scientific research to drive the update of teaching content and the improvement of teaching quality.

5. Conclusion

Building a “dual-qualification and dual-competence” teaching team for nursing majors in higher vocational colleges is a systematic and complex project, which must break through the superficial misunderstanding of valuing certificates over the cultivation of practical abilities. It is particularly important to establish a comprehensive system integrating practice, education, and evaluation based on the principle of in-depth cooperation between schools and enterprises. Only by proactively integrating into relevant industries can vocational colleges reshape and strengthen their confidence and concepts in talent cultivation^[14]. The practice of the nursing professional teacher team of Guangzhou South China Business and Trade Vocational College has proved that only by allowing teachers to engage in in-depth work at the clinical frontline, transforming industry standards into specific teaching content, and using real clinical cases as important teaching resources, can high-level nursing talents meeting the needs of the big health industry be efficiently cultivated.

The development of education lies in improving the quality of teachers^[15]. In the future, the team should strive to establish a stable long-term cooperation mechanism between the school and enterprises. By signing specific cooperation agreements, the responsibilities and rights of both parties in the process of school-enterprise joint training of teachers should be clarified, so as to effectively solve the “last mile” problem in practical teaching. In addition, it is necessary to explore the career development path for “dual-qualification” teachers, improve relevant incentive policies, stimulate teachers' internal motivation for self-improvement, and promote the dual improvement of their professional skills and practical abilities.

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