Construction and practice of practical teaching system for intelligent health care service and management in vocational colleges

Bi Yunxiao

Zibo Vocational Institute, Zibo, 255314, China

Abstract: In the context of an aging population, the shortage of senior care practitioners and the lack of professional capabilities have become increasingly prominent. In order to adapt to the new situation of the development of senior care services, new standards and new requirements have been put forward for the practical teaching of smart and healthy senior care services and management. Through the construction and practice of the practical teaching system of smart and healthy elderly care services and management, the basic framework of the practical teaching system, the curriculum system, the platform construction and evaluation mechanism, and the construction effect are discussed, forming a "four-in-one" practice. The teaching system lays the foundation for deepening the practical teaching reform of smart and healthy elderly care services and management, and cultivating high-quality technical and skilled talents.

Keywords: Smart Health Elderly Care Service and Management Majo; Practice teaching system

1. Introduction

According to the seventh national census, there are about 264 million elderly people over the age of 60 in China, accounting for 18.7% of the country's total population. Meeting the various needs of the huge number of elderly people and properly solving the social problems brought about by the aging population is related to the overall development of the country and the well-being of the people. At present, China's elderly care service talents have problems such as low overall quality, limited professional level, and insufficient business ability [1-2], which cannot meet the growing demand for elderly care services. The new Vocational Education Law points out that it is necessary to speed up the cultivation of technical and skilled personnel in health care and other fields. Practical education is the inevitable requirement of personnel training in higher vocational education, Practical teaching is the most direct link to improve students' skills, Reforming the practical teaching system is one of the effective ways to actively respond to the background of aging and improve the quality of personnel training for elderly care services. The Nursing School of Zibo Vocational College has opened a full-time higher vocational senior service and management professional education since 2015. Approved as a national backbone major in 2019, In 2020, the Ministry of Education changed its name to Smart Health Elderly Care Service and Management Majo. Over the years, the smart health care service and management major has been based on the combination of medical care and health care, focusing on the integrated development of the medical care and health care industry, adhering to the concept of "emphasizing practice, strengthening skills, and improving quality", and regards practical teaching as the key to the cultivation of high-quality technical and skilled talents. In the link, gradually explore a practical education system based on professional skills training, with skills competitions as the starting point, and on-the-job practice as an extension, and continue to deepen the integration of production and education to improve the quality of talent training.

2. Basic framework

The basic framework of the practical teaching system is carried out by the professional teaching team on the basis of research, and is jointly completed with the participation of various teaching departments, training centers, practice bases and enterprises [3]. With the goal of high-quality technical and skilled talents, the curriculum system as the main body, the internal and external training platforms as the support, and combined with the guarantee mechanism and evaluation mechanism, a "four-in-one" smart health care service and management professional practice teaching system has been

constructed. For individuals, families, communities, and institutions in the elderly care industry, it focuses on the cultivation of "nursing care skills" for the elderly, and focuses on the training of elderly social work capabilities, elderly rehabilitation and health care capabilities, elderly care institution management capabilities, and information processing capabilities. High-level health care service and management talents with high literacy.

3. Curriculum structure

In view of problems such as the low professional identity of students majoring in smart health care and management of smart health care services and management in higher vocational colleges, and the inability of professional knowledge and skills to meet the actual working conditions of care institutions [4-5], we have continuously optimized on the basis of the original practice teaching system. By setting up four modules of practical activities: in-class practice-extra-curricular practice-internship training-skill competition, the three-level progressive practical ability improvement of basic-advanced-extension is achieved, thus constructing a professional ability-based "three-level" Horizontal and four vertical" practical teaching curriculum system. It integrates humanistic care, ideological and political education, labor education, etc. into practical teaching [6], realizes a high degree of integration of humanistic literacy, professional spirit and professional skills, and cultivates senior care service talents who keep their original aspirations, cast their beliefs, strengthen humanities, and have great love.

"Three horizontals" refers to the practical ability system including the basic layer, advanced layer and extension layer. The basic layer establishes the basic skills framework required by students, mainly cultivates students' abilities in observation, information acquisition, language communication and expression, information processing, etc., laying the foundation for cultivating students' comprehensive vocational skills and the traditional cultural spirit of respecting the elderly and loving the young. The advanced level will enable students to master the necessary health assessment ability, life, basics, rehabilitation, first aid and psychological nursing professional skills necessary for elderly care through training and teaching courses such as elderly care technology, comprehensive health assessment for the elderly, and rehabilitation and health for the elderly. The extension layer is to cultivate students' comprehensive practical ability in many aspects such as unity and cooperation ability, innovation consciousness, innovative spirit, comprehensive application of professional knowledge and skills on the basis of strengthening students' special skills in geriatric nursing and related medical care.

"Four verticals" refers to the four practical modules of in-class practice, extra-curricular practice, practical training, and skill competition. In-class practice includes humanistic literacy class practice, basic medical experiment, in-class practical training in professional courses, and comprehensive service and management training for the elderly. Extracurricular practice mainly refers to the activity courses including second classroom activities, social practice, professional role experience, innovation and entrepreneurship. Internship training includes on-campus internship, hospital cognitive practice, 1+X senior care vocational skills training, 1+X dementia senior care vocational skills training, nursing home job practice, and graduation design. The skills competition module integrates the elderly service skills competition, health and social care skills competition, etc. into the practical teaching curriculum system, providing students with a three-level skills competition platform for city competitions, provincial competitions, and national competitions, and continuously improving students' professional skills and levels.

4. Platform construction

Keeping up with the pace of the development of the medical care and health industry, we will jointly build a medical care and health industry college with hospitals and elderly care institutions, and build a smart health care service and management platform, which can collect and share the health data of the elderly and provide remote medical monitoring for the elderly. , regular follow-up, health guidance and health education and other services, and apply relevant data and results to practical training.

Relying on the remote network teaching and service system of the Shandong Telemedicine Center, and the digital and teaching resource library in the school, a modern comprehensive medical training center integrating remote diagnosis, virtual simulation and training has been built, forming a "three platforms and four Center" (the three platforms refer to the professional basic platform, the virtual

simulation platform, and the smart health care service and management platform; the four centers refer to the medical and nursing health assessment training center, the first aid training center, the traditional Chinese medicine training center, and the pension training center) It is an on-campus training base that integrates the core and lesson training, strengthens the practical teaching link and emphasizes the authenticity and comprehensiveness of the practical teaching environment [7], which greatly improves the level of students' skills training and the utilization rate of training equipment.

Based on the principle of combining medicine and nursing, taking into account the industry standards of elderly care services, connecting with the goal of talent training, reforming the traditional 2+1 teaching mode, forming a 2+0.4+0.6 teaching mode, 0.4 is cognitive practice, and 0.6 is nursing home post practice. Cognitive Internship cooperates with a number of hospitals above the second grade in the province and abroad. The main practice departments are geriatric wards, acute and critical care wards, rehabilitation and health care departments, geriatric clinics, and nursing departments. Nursing home internships include public or private elderly care institutions such as elderly apartments, nursing homes, nursing homes, and home-based elderly care service centers. Elderly care marketing management positions, etc. The combination of theory and practice through practice has improved students' professional quality and professional skills.

5. Safeguard mechanism

The practical teaching system of smart health care service and management major is managed by two-level departments—the school's academic affairs office. Both departments and schools have formulated a series of measures, mainly from the construction of teaching staff, practical funding investment and practical process management. To ensure the normal operation of the practical teaching system.

The construction of teaching staff is a strong support for professional development. Therefore, the college attaches great importance to the training of dual-qualified teachers through measures such as "going out and inviting in", and builds a dual-qualified teacher team [8]. On the one hand, teachers are encouraged to go out to participate in academic conferences and various training and learning; And cooperate with hospitals and pension institutions to carry out mutual employment of teachers, regular practice exercises, etc. to continuously improve the level of teachers [9-10].

Practical funding is an important guarantee for the operation of the practical teaching system. Every year, the college invests in the special funds for practical training and the operation and maintenance of instruments and equipment, and formulates the purchase plan of experimental training consumables every semester according to the inventory and course opening conditions to ensure the smooth development of practical teaching; formulate training room management To ensure the orderly operation of the training room, the utilization rate of the training room is 100%; to establish a preparation and operation mechanism for the teacher-student skill competition , according to the requirements of the competition, timely update and supplement the equipment required for the competition, and provide students with good preparation conditions and environment.

Practice process management is an important link to ensure the operation of the practice teaching system. Formulate practical teaching plans, practice plans and strengthen the process management of the practice training links, and conduct systematic and information management of the practice process through the on-campus practice management system and the practice management system of Shandong Vocational Colleges. Implement curriculum management for student internships, constantly improve the practice management methods, practice assessment methods, practice accommodation methods, practice leave management methods and other systems to standardize practice management, establish a three-level supervision and management mechanism for internships in departments, schools and provincial education departments to improve the quality of internships , so that students can master job skills, improve their professional ability and social adaptability, enhance their employment competitiveness, and enhance their sense of social responsibility, innovation and practice through internships.

6. Evaluation mechanism

Practical teaching evaluation is divided into two parts: internal evaluation and external evaluation. In-school evaluation mainly refers to the evaluation of practical teaching quality, including supervision evaluation, leadership evaluation, peer evaluation, student evaluation, etc., and provides opinions or

suggestions on the preparation of practical teaching resources, teaching content, teaching implementation, classroom management, and teaching effect. The off-campus evaluation mainly includes evaluations and suggestions on the teaching resources, equipment and practical teaching quality related to the school's practical teaching by social organizations, enterprises, and previous graduates related to the profession.

7. Conclusion

The construction of practical teaching system is an extremely important link in cultivating professionals in smart and healthy elderly care services and management.Zibo Vocational Institute relies on the superior resources of medicine, nursing, health care, and nursing to deepen the reform of the three educations. Taking practical courses as the starting point and the revision of the talent training program as an opportunity, it organically combines the talent training goals with the enterprise employment standards and skills competition standards to optimize Reorganize the curriculum system. Optimize and reorganize the curriculum system, form a combination of curriculum and practical training, professional curriculum system and 1+X senior care and other vocational skills certificate, senior service skills competition, health and social care competition, post-class competition certificate integration comprehensive practice education system. The construction of the teaching staff has been continuously improved, and the ratio of double teachers has reached 100%. In recent years, students have won the first prize in the National Senior Vocational College Elderly Service Skills Competition and Health and Social Care Competition for four consecutive years. Graduates have a high employment rate and are well received by employers.

References

[1] Gong Ni, Wang Huiping. (2020).Study on practical teaching model of service and management for the Aged in Higher vocational colleges: A case study of Guiyang Junior High School.[J]. Industry & technology forum, 19(6):197-198.

[2] Liu Xihua, LAN Yuansong, Yue Guihua, Zhang Lijun, Liu Xueping, Luo Man, Zhou Yuanming. (2020), Reflection and practice on the integration path of "1+X" certificate system and personnel training of senior service and management in Higher vocational colleges [J]. Modern vocational education. 48 : 74-75.

[3] Zeng Xingye, Chen Chan, WANG Hanlu, Wu Shikui.(2022). Construction and implementation of practice teaching system of chemical engineering and process specialty [J]. Laboratory Science,25(01):112-122.

[4] Leng Mei. (2020).Research on the Training of Senior Service and Management Professionals in Shandong Province [J]. Society and Public Welfare,(4) : 86-88.

[5] Liu Shaoqin, he Xiayang, Zhou Ying, fan Guanghui. (2020).Analysis of influencing factors of professional identity of geriatric service and management students [J]. China Higher Medical Education.(11):5-6.

[6] Kuang Yingying. (2021).The current situation and training path of professional quality of senior service and management students in Higher Vocational Colleges in Chongqing [J]. Western quality education, 7 (22): 77-79.

[7] Zhu Wenjuan, Zhao Jiuhua. (2018).Innovation of training mode for senior service and management professionals in Higher Vocational Colleges [J]. Chinese Journal of gerontology. 38 (15): 3823-3824.

[8] Zhao Wenxiu. (2020).Research on the reform of the training mode of senior service and management professionals under the "1 + X" certificate system [J]. Journal of Changsha civil affairs vocational and technical college. 27 (02): 96-97.

[9] Sun Huijuan.(2020) Research on the problems and Countermeasures in the training of senior service and management professionals in Shaanxi Higher Vocational Colleges [J]. Modern vocational education. (03): 24-25.

[10] Song Yanping, Guo Xiaohui, Cai Qiaoying. (2019).Research and practice of productive training bases jointly built by schools and enterprises - Taking the elderly service and management as an example [J]. Health vocational education. 37 (11): 18-19.