

Construction of Imaging Technology Training Base and Practical Teaching Under the Cooperation of Colleges and Universities: Taking Vocational Colleges as an Example

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Abstract: With the rapid development of modernization and the reform and development of quality education, the main direction and goal of vocational colleges in the new era is to cultivate high-level skilled talents required by the times. With the development of globalization and the refined division of labor in industrial technology, the requirements of various industries for high-level skilled talents with the ability to adapt to market development are gradually increasing. This article focuses on exploring and analyzing the demand for hospital imaging technology talents under the rapid development of the new era industry, and discovering the problems in talent cultivation in vocational colleges. In response to the existing problems, actively utilizing college resources and practical opportunities, innovating the college school cooperation mode and teaching methods for imaging technology majors in vocational colleges, and gradually expanding into a standardized, scientific, and developable college cooperation mode for vocational education, Implement the national strategic plan for cultivating quality talents in vocational colleges, focus on doing a good job in the work of "cultivating morality and talents", adhere to the "three education" reform, and improve the quality of talent cultivation.

Keywords: Medical Imaging Technology; College Cooperation Mode, Vocational Colleges

Introduction

The current medical imaging technology education model in vocational colleges has become disconnected from the practical requirements of talent in the development of the times. The imaging technology education and teaching in vocational colleges have not met the requirements of employers due to various factors such as outdated equipment and insufficient teaching staff. Colleges and universities work together to build the most valuable and authoritative skills and technology teaching for students in the education and teaching process, and establish a multi-functional imaging technology training base on campus to carry out decomposed professional teaching of job skills and professional experience teaching, fully simulating the professional work environment in the future. This can not only help students master advanced job skills, experience job responsibilities and values, More importantly, it is conducive to the growth of students' professional quality and ethics, allowing them to have more professional advantages in the wave of employment.

1. The demand for medical imaging talent cultivation in vocational colleges in the new era

Students majoring in medical imaging aim to cultivate high-level medical professionals with basic theoretical knowledge and abilities in basic medicine, clinical medicine, and modern medical imaging, who can work in medical imaging diagnosis, interventional radiology, and medical imaging technology in medical and health institutions. In terms of student employment, medical imaging graduates can work as both medical imaging diagnostic physicians and medical imaging technicians. It can be said that medical imaging plays an important role in medical research that cannot be ignored, and even serves as an important foundation for modern medical research and treatment. Its employment prospects can be said to be very broad. In any modern hospital, radiology is

indispensable, and it can be said to be a traditional essential department of a comprehensive hospital. With the organic integration of electronic computer technology, modern physics, electronics, and traditional radiology, Modern radiation medicine has been equipped with high-tech wings, and radiology has shown new vitality in the medical field, playing an increasingly irreplaceable role in diagnosis and treatment work. The development of the times has set new development goals for medical imaging, as well as new requirements for talent skills education.

1.1 Possess socialist core values

The moral cultivation and life pursuit with socialist core values are the driving force for talents to meet the needs of socialist construction, work tirelessly in their job positions, and ultimately achieve their own life values. In terms of talent construction, especially in medical related majors, in recent years, with the spread of the novel coronavirus epidemic, the pressure on the medical system is increasing, which requires the cultivation of students' socialist core values and strong comprehensive psychological quality in medical care majors of higher vocational colleges, and the cultivation of new era talents who love the motherland, stick to their posts, are honest and trustworthy, and are united and friendly. In today's society, there are abundant material conditions, but the attraction of material desires is also increasing, and the construction of internal moral qualities determines the foundation of talent's three values. Whether one has the perseverance to persist in lifelong learning of medical technology skills, the ability to face unexpected events and major disasters, and the ability to withstand pressure, as well as the ability to be honest with colleagues and unite and coexist, all of which directly affect the quality of medical talents. Only with the correct three perspectives, ideals, confidence, and perseverance, and through continuous learning, innovation, and practice, can one ultimately become the high-quality medical talents required for socialist development Composite medical professionals.

1.2 Good at learning and improving job skills

The cultivation of high-quality medical imaging technical talents required for socialism in vocational colleges means that the cultivation of medical imaging technical skills is equally important as the socialist core values. During the internship period, students graduating from universities are already facing the skills examination for formal hospital positions. If their skills are recognized and there are no plans to pursue further education, they can obtain the qualification for early admission to the hospital. However, students who have not been hired in advance will face the pressure of recruitment competition for social positions. Even if medical units have dedicated personnel to lead them, they face strong work intensity and pressure, and they are more eager to recruit medical imaging personnel who can directly take up their positions or meet their work needs through short-term adaptation. So in vocational colleges, middle school students should develop the ability to learn and improve their job skills. Only by being good at learning and cultivating habits of learning and thinking can one proficiently master skills and professional standards, and combine theory with practice. Improving job skills is an inexhaustible driving force for one's own technical ability to ensure being at the forefront of the industry.

2. The significance of building an imaging technology training base through cooperation between two universities

Under the trend of college cooperation, deepening reform and innovating the talent education model in vocational colleges is a subversion and exploration of the traditional skill teaching model in vocational colleges. Among them, establishing an imaging technology training base is an educational concept upgrade that fully conforms to the development laws of the medical system in the new era, and there are also many challenges on the way forward. While facing challenges, consider the reasons behind the difficulties, so that the collaborative education model between universities can truly coordinate with the development of medicine and smoothly carry out popularization.

The talent cultivation standards of medical imaging vocational colleges in the new era must be coordinated and aligned with the development of China's medical and health industry and the world's advanced imaging technology. With corresponding basic medicine, clinical medicine, and modern medical imaging technology, the establishment of medical imaging technology training bases through cooperation between colleges and universities is an innovative point in talent cultivation mode and a focus on integrating the coherence of students' skills in various majors.

3. Strategies and methods for establishing image training bases through cooperation among three universities

3.1 Collaborate for long-term development and sign detailed cooperation agreements

Vocational colleges are located throughout the country, but medical resources are widely distributed in first tier cities. Collaborating with universities to establish imaging training bases has broken through the geographical limitations of resources, which is conducive to improving the quality of professional skills of school graduates and increasing the employment rate of local professional counterparts. At the beginning of the establishment of an imaging training base through university cooperation, the school and the institution should take a long-term perspective, jointly seek long-term and mutually beneficial cooperation and development between the school and the institution, and formulate a detailed development framework and cooperation plan and methods to ensure the smooth and sustainable development of the cooperation.

3.2 Based on the establishment of an imaging training base, innovate and deepen the content and form of university cooperation

Based on the establishment of an imaging training base, the biggest challenge lies in the preparation of funds and the cost and expenditure of mechanical maintenance in the later stage. Moreover, after the establishment of the imaging training base, it still faces the updating and upgrading of mechanical equipment. Nowadays, the price of medical technology equipment is not affordable, and it is not a simple medical treatment structure or a school that can afford it. Although the establishment of an imaging training base has many benefits for education, teaching, and career development, The expensive construction cost has become a tall wall, hindering the path of university cooperation based on the establishment of image training bases. So on the path of cooperation, it is necessary to innovate and deepen the content and form of university cooperation through various forms.

4. Conclusion

Overall, there are many methods and attempts to establish imaging training bases based on university cooperation in the reform and innovation of talent cultivation models in vocational colleges. However, it also inevitably faces issues such as tight funding, differences in educational resources, and time constraints in hospital teaching and research units. However, this does not hinder universities from jointly establishing imaging training bases, as establishing imaging training bases is not only beneficial for students in their respective majors, It is also a project plan that can help all medical students, and is an important part of practicing high-quality and effective education reform in vocational colleges. Educators must be supported by a firm belief in education reform; Spread thinking and solve the difficulties and twists faced in the process of establishing an image training base; Taking into account the overall situation and leveraging multi-dimensional social professional forces, we aim to maximize and optimize the role of the imaging training base.

References

- [1] Mu J, Wang J, Ma Y, et al. Research on the construction and training teaching model of higher vocational imaging technology training base in cooperation with colleges [J]. Medical and Health Equipment 2016; 37 (7): 5.
 - [2] Shi H, Research on the construction of vocational imaging professional training base [J]. Scientific Chinese 2017; (4Z): 1.

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