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Analysis of Career Development Path Based on the Three Comprehensive Practice Education Models of Medical Laboratory Technology

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Abstract

This paper expounds on the connotation of the three complex practical education models of medical laboratory technology and its application in career planning. Through the cooperation and resource sharing of schools, enterprises, and hospitals, the 33 Complex realizes the close integration of theoretical teaching and practice and provides comprehensive preparation for students' clinical practice and employment. This paper further discusses the career planning strategies of medical laboratory technology students based on this model, including personal positioning, goal setting, and career development path analysis. Through the analysis of typical career development cases, the challenges and opportunities in the industry are revealed. Finally, this paper discusses the positive impact of the three complex models on career development, including the promoting role of resource sharing and the advantages of career development under mutual benefit and win-win results. It looks forward to the future trends and challenges.

Keywords

medical laboratory technology, Three-Three Complex, Practical education, career planning, resource sharing

1. Introduction

1.1 Definition and characteristics of the three complex

In medical laboratory technology, the three-comprehensive practice education model is an innovative way to cultivate talents. This model integrates the resources and advantages of schools, enterprises, and hospitals to jointly participate in the training of medical laboratory technology professionals. Similar to the "enterprise college model", under the leadership of industry-related associations, vocational colleges establish cooperative relations with as many enterprises as possible, and the relevant enterprises and colleges cooperate to design the integration of production and education training programs. The three complex practical teaching model is a kind of practical teaching of "new talents" training mode applied to majors including but not limited to medical laboratory technology. The practical teaching of the "Three-Three Complex" mainly covers the three parties of the school, the employer, and the students, and will work together to include the practical teaching in the relevant scope of the "Three-Three Complex" joint training. The practical teaching of the 33 complexes follows the win-win situation of "resource sharing and mutual benefit", improves

students' comprehensive practical ability, and provides support for student's future career development at the student level. Students are divided into small groups and interned or collaborated with non-patient-provided medical laboratory participants. It is mainly a process for students to grasp the theoretical methods of medical testing and solve some of these substantive problems. From different perspectives, students can better understand teaching, exercise themselves, and be targeted.

In the tripartite collaborative practice training model, the school mainly carries out the teaching and education of practice theory education and basic courses in the process of students' practice training, systematically imparts medical laboratory technical knowledge, and exercises and assesses students' relevant basic operation skills, to cultivate and exercise students' skills for daily work. For example, the course "Clinical Laboratory Technology" offered by Shandong Modern University includes hematology, immunology, etc., which provides basic and theoretical support for other disciplines. As a site for student practice, the company can provide students with other cutting-edge equipment and conduct operational exercises for students. For example, the training hospital laboratory center of school-enterprise cooperation is equipped with a variety of advanced equipment and the latest cutting-edge equipment for students, and all students can be divided into other experts of the enterprise to observe and train the latest medical testing technology equipment and operation methods. The school provides theoretical teaching, the enterprise provides practical training equipment operation exercises, and the hospital provides real medical examination processes and practical training. For example, the hospital provides students with off-campus practical training places and can send students to work directly in the front-line clinical laboratory, discuss related difficult diseases with the clinician group, and accumulate theoretical data in the later stage.

This internship method bridges the gap between experimental and practical work in the traditional mode of school teaching and daily application, and students intuitively understand the application of medical laboratory technology in real patient testing, to improve their professional ethics and comprehensive application ability. For example, students can use a series of testing techniques to verify real medical information in the internship, to continuously improve students' practical testing ability and basic laboratory skills. Not only that, the internship and education model of the 33 complex can also ensure that the relevant employers can recruit employees who have practiced various types of inspections and mastered basic technical skills, to better connect talent training with the needs of enterprises, and realize the training and employment of employers at a lower cost. In addition, students may discover their talents, interests, and needs through continuous "experimentation" during the internship, and at the same time, they can choose a practice trajectory according to the specific situation of their internship experience, and enter the field of clinical positions, data collation research and development, or independent identification, to lay the foundation for the next step of their career development.

1.2 The application of the three-three complex in the specialty of medical laboratory technology

Under this model, important changes have taken place in the training of medical laboratory technology professionals. The close cooperation between schools, enterprises, and hospitals makes theoretical teaching no longer isolated from practice but interpenetrates and promotes each other with practice. For example, during the school period, students can participate in the latest medical laboratory technology and equipment projects, such as laboratory practice, clinical case analysis, etc., which will help students improve their ability to solve practical problems. In addition, clinical internship serves as a bridge between the school and the workplace, so that students can gradually adapt to their professional roles during the internship process, clarify the direction of career development, and lay a solid foundation for smooth employment.

To sum up, the application of the three complex practical education models in the medical laboratory technology major not only helps to improve the comprehensive quality and vocational ability of students, but also cultivates a large number of high-quality talents for the industry, and promotes sustainable development and progress of medical laboratory technology.

2. Research Object

2.1 The importance of students' career planning

The "Three-Three Complex" training model provides a different vision and abundant resources for the career planning of medical laboratory technology students. Through this training model, students can not only complete the basic abilities required by professional courses and internship training programs, but also be able to continuously improve themselves in practice, give full play to their potential, and expand more space for their career development. The "Three-Three Complex" is mainly led by the school, with enterprises and internship testing departments as the main synergistic body, providing more opportunities for students to participate in "practical activities" and "clinical internships", so that students can improve their practical skills, discover their career positioning, and formulate a feasible and targeted career plan accordingly. This move not only incorporates the needs of educational reform under the new situation but also fully takes into account and meets the needs of students' individual growth development and self-realization.

serial number	***Aspects of importance***	***Specific performance***	***Influencing factors***	***Relevant statistics***	***Case Study***	***Corresponding policies or recommendations***
1	*Enhance employment competitiveness*	*Clarify career goals and increase the success rate of job hunting*	*Industry needs, personal positioning*	*85% of students said that finding a job was smoother when they had a clear career goal*	*Student A successfully entered the company of his choice through career planning*	*Plan your career early and stay on top of industry trends*
2	*Promote personal development*	*Discover your potential and plan for the long term*	*Assessment of personal interests and abilities*	*70% of students believe that career planning helps them grow personally*	*Student B discovered his leadership skills through career planning*	*Conduct a self-assessment to identify strengths and weaknesses*
3	*Increase career satisfaction*	*Match personal interests with careers and increase work happiness*	*Work content and work environment*	*90% of students who are pursuing a career plan report that they are satisfied with their jobs*	*Student C found a job he loved through career planning*	*Find out what interests you want to find the right match*
4	*Reduce career confusion*	*Define your career path and avoid blindly changing jobs*	*Career development, industry knowledge*	*65% of students feel lost when they don't have a career plan*	*After the career plan, student D clarified the direction of career development*	*Increase industry knowledge and clarify career paths*
5	*Improve salary packages*	*Plan your career and earn a higher*	*Vocational skills, market*	*The average salary of students who are planning*	*Student E salary has be significantly increased*	*Improve professional skills and pay attention to*

		salary	*demand*	*for a career is 20% higher than that of students who are not planning*	*through care planning*	*market demand*
6	*Enhance workplace adaptability*	*Anticipate the challenges of the workplace and prepare for them*	*Workplace environment, interpersonal relationships*	*80% of students who have made career plans say they can adapt quickly to the workplace*	*Student F learns to deal with workplace relationships in career planning*	*Learn workplace skills and improve interpersonal skills*

2.2 Career planning strategies under the three-three complex model

The Department of Medical Laboratory Technology uses the three integrated practical education models to guide students so that they can understand the whole learning in life, participate in various practical activities in school, and learn from their mistakes in practical activities. The three complex practical education model refers to the cooperation between schools, enterprises, and hospital employers to run schools and jointly train students. Schools, enterprises, and hospitals all have their resources, and students will get wider and deeper learning and practice, which will help students grow, and they will feel more inspired and accumulate rich experience, which can not only enrich their business reserves, but also cultivate good team spirit, and also cultivate good innovation and solution skills. Therefore, students should make full use of the advantages of the three complex practical education models and establish their own career goals in their career planning. For example, you can enter related disciplines and projects to carry out work, and in the resource collaboration of schools, enterprises, hospitals, and employers, you can get to know a lot of relevant network resources and a lot of practical technical skills, to lay the foundation for future career development.

Students' career paths are largely susceptible to the influence of teachers, and if they can make full use of this influence and gradually enable students to look at problems independently and find a path that suits their career aspirations, then career planning will have a huge practical effect. At present, the number of college students is not the main factor in the difficulty of employment, but the quality of the problem. Theoretical knowledge is the school for students to provide students with all the knowledge, theory, and technology reserves, including subject knowledge, textbook knowledge of related courses, basic theoretical knowledge, etc., which helps students to deeply understand the theoretical connotation of the relevant majors and improve their workability, for example, the major has opened many compulsory courses, elective courses, theoretical courses, experimental courses, etc. so that students can systematically form their professional knowledge system and apply the knowledge they have learned in practical activities; The school has a large number of materials, equipment, instruments and other facilities, which also provides considerable convenience for students' learning and practical work. Therefore, in the future work (or career), through the resources provided by the school, you can better experience the relevant professional knowledge and understanding, and pave the way for future practical work. At the same time, they can also participate in relevant topics and experiments during the school period, and constantly enrich the relevant knowledge reserves, to better prepare for academic research and professional positions in related majors.

As an important platform for clinical internship and employment, the hospital provides students with the opportunity to have direct contact with patients and clinical samples, which helps to develop students' ability to solve practical problems. When setting long-term career development goals, students should consider how to use the hospital's resources to improve their clinical skills and awareness of medical services to better adapt to the future work environment.

To sum up, based on the three comprehensive practice education models of medical laboratory technology, students' career planning strategies should comprehensively consider the resources of

schools, enterprises, and hospitals, and formulate long-term and short-term goals that are not only in line with personal interests but also suitable for the development of the industry. By taking full advantage of this model, students can achieve better development and achievement in their careers.

3. Research Suggestions and Countermeasures

3.1 Typical Career Development Path Cases

Medical examination technology is a standardized training project, and the employment positions of medical examination technology graduates are very widely distributed. The reform of the education model is the most important thing in the practice of the three-three complex. The three complex practice education model integrates schools, enterprises, and hospitals to provide students with a learning environment for theoretical learning, practical operation, and clinical practice. The school provides basic medical theory content, enterprises, and hospital laboratories provide practical operations to students, and hospitals provide clinical internships to students. Through this teaching method, students can finally get the training of enterprises and hospitals, which will help their ultimate career development. The three aspects, namely enterprises, schools, and hospitals, are relatively well cultivated, which is helpful for career development. Before the reform, the training path was that the school provided basic medical theoretical content, practical operation of enterprises and hospital laboratories, and clinical practice in hospitals. Through the reform of the teaching mode, students have been trained in three aspects: medical foundation, modern medical engineering, and clinical practice.

The specific realization of the talent model for students majoring in medical laboratory technology is the practice of educating people in a three-to-three complex. The method of combining theoretical learning and practical activity training allows students to have a relatively simple and standardized career development path, and at the same time, students can combine the theoretical knowledge learned in the course with social practice through project practice and internship, to obtain corresponding improvement. Through the guidance of the three to three comprehensive practical education methods, the theory and practice are combined to help students better carry out career planning, so that they can improve their abilities in all aspects of practice.

3.2 Challenges and opportunities in career development

In medical laboratory technology, the career development path based on the three comprehensive practice education models presents unique challenges and opportunities. On the one hand, the fierce competition in the industry and the rapid pace of technological renewal pose significant challenges. With the continuous progress of medical technology, medical testing technology is changing with each passing day, and professionals need to continue to learn to adapt to the application of new technologies and equipment. At the same time, the demand for high-quality talent in the industry is strong, and the competitive pressure is increasing.

On the other hand, this model also brings unprecedented opportunities for students and professionals majoring in medical laboratory technology. In terms of the cultivation of diversified skills, the three complex models provide students with rich practical opportunities through the close cooperation of schools, enterprises, and hospitals. This not only helps students to master solid theoretical knowledge but also hone their skills in practice and form interdisciplinary comprehensive abilities. In addition, with the convergence of the medical industry, medical laboratory technicians with diverse skills and interdisciplinary knowledge are more competitive in the job market and can take on more complex and diverse tasks.

To sum up, the career development path based on the three comprehensive practice education models of medical laboratory technology is not only full of challenges but also contains opportunities. In the face of the dual challenges of industry competition and technological updating, medical laboratory technology professionals should continuously improve their comprehensive quality, grasp the development opportunities of diversified skills and interdisciplinary knowledge, and make great progress in their careers.

4. Conclusion

4.1 The role of resource sharing in promoting careers

In the professional education of medical laboratory technology, the three complex models have a profound impact on the career development of students with the help of its unique resource-sharing mechanism. This model integrates the high-quality resources of schools, enterprises, and hospitals to create a comprehensive and multi-level training environment. The school's theoretical teaching and basic education resources help students lay a solid professional foundation so that they have a solid theoretical literacy at the beginning of their careers. The practical opportunities and advanced equipment provided by the company allow students to deepen their theoretical knowledge and master the latest technical methods in practical operation, which undoubtedly adds important capital to their future career development.

It should be pointed out that through the contact and application of advanced equipment of the enterprise, students can not only grasp the fresh information in the industry the first time, but also strengthen their creative thinking ability to solve related problems, and will accept and master new knowledge, new technology, and new equipment faster and better when they are engaged in related work in the future and put into the medical process more quickly.

In addition, students have the opportunity to do clinical internships in hospitals, which allows them to develop their professional skills in a real-world medical setting. During the internship, students are exposed to a variety of real-world cases and learn how to develop appropriate testing plans for the specific conditions of patients, which is essential for them to become qualified medical examiners in the future. At the same time, the hospital provides professional guidance to help students continuously improve themselves during the internship process, and clarify their career orientation and development direction.

To sum up, the three complex models have paved a broad career development path for students majoring in medical laboratory technology through resource sharing and complementary advantages.

4.2 Career development advantages under the concept of mutual benefit and win-win

Under the concept of win-win cooperation, the three comprehensive practice education models of medical laboratory technology have shown significant career development advantages. Through the close integration of schools, enterprises, and hospitals, this model not only broadens students' employment channels and opportunities but also substantially enhances their professional quality and practical ability. The theoretical teaching provided by the school provides students with a solid foundation and equips them with the core knowledge of medical laboratory technology. Companies provide valuable hands-on opportunities for students to apply what they have learned and improve their skills in a real-world work environment. Especially by operating advanced medical equipment, students can gain a deeper understanding of the practical application of medical laboratory technology. In addition, as an important base for clinical practice, the hospital not only provides students with rich internship resources but also paves a broad path for their future employment. On the whole, the three-three comprehensive practical education model strengthens the professional quality of students from multiple dimensions, so that they will have stronger competitiveness in their future careers.

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