Research on the Construction of Off-Campus Practice Teaching Base for Applied Undergraduate Medical Colleges—Taking Science and Engineering Major of Medical Technology College of Qiqihar Medical College As an Example

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ABSTRACT
The construction of practical teaching base for applied undergraduate medical colleges is a very important condition for training applied talents. This article takes the current situation of the construction of off-campus production practice bases for students of science and engineering majors in the Medical Technology College of Qiqihar Medical College as an example. The current school-enterprise cooperation agreement of the off-campus practice teaching base in the construction process of the off-campus practice teaching base is too simple, and the off-campus cooperation agreement is too simple. The practice teaching base construction is not clear enough, the objectives are not clear, the management is not standardized, the practice teaching base construction has too little investment, the school and enterprise have a single form of cooperation, and the wide-area cooperation projects are too few. Clarify the ideas, objectives, and contents of the construction of off-campus practical teaching bases; clarify the responsibilities and obligations of both schools and enterprises for the construction of teaching bases; protect the base construction funds, and at the same time look for more extensive cooperation projects and in-depth cooperation to build the base into more Brand base for cooperation.

Keywords: Applied undergraduate medical college, off-campus practice teaching base, talent training

1. INTRODUCTION
Applied undergraduate medical schools aim at cultivating high-quality application-oriented talents, with innovation and practical application training as the mainline, rationally plan and build on-campus practice teaching bases, improve the functions and operating mechanisms of off-campus practice bases, and deepen school-enterprise cooperation. Cultivate a dual-qualified and dual-ability teacher team that combines full-time and part-time jobs. The cultivation of innovation consciousness, entrepreneurial ability and practical application ability is run through the whole process of talent training. Make learning, practice, and innovation mutually promote; coordinated development of knowledge, ability, and quality; take market demand as a guide, highlight the cultivation of college students' ability, improve students' ability to analyze and solve problems in their work after graduation, and enable school personnel training and The demand for corporate talent is seamless [1]. The construction and management of off-campus practice teaching bases is an important part of higher medical education and teaching. It is one of the basic conditions for colleges and universities to improve teaching quality to ensure practical teaching links, and train advanced applied medical talents. In recent years, to strengthen the cultivation of students' practical ability, our school has seriously carried out the construction and management exploration of off-campus practice bases and achieved gratifying results. The graduates of our school have shown good qualities in the employers and have been well received by the employers. The advancement has promoted the common development of the school and the off-campus practice teaching base [2].

According to the strategic requirements of our country's health development, the orientation of Qiqihar Medical College is "facing the grassroots, service area, based on Heilongjiang, and radiating the whole country, focus on general undergraduate education, Steadily carry out postgraduate education, continuing education and international student education; on the basis of medical disciplines, we should actively build new and interdisciplinary disciplines related to medicine and pharmacy, Construct a discipline system that supports each other and develops in a coordinated manner; Cultivate high-quality applied medical and health talents with all-round development of morality, intelligence, physical education, labor, beauty, social responsibility, innovative spirit and practical ability. In order to achieve this goal, the
school must strengthen the cultivation of students' practical ability, strengthen the practice teaching link outside the school, and strengthen the construction of the practice base outside the school will provide a reliable guarantee for the realization of this goal. To adapt to the changes in market demand and cultivate applied innovative talents to adapt to social development, the Medical Technology College of Qiqihar Medical College revised the training program. Since 2012, the "3+1" training program has been implemented. Compared with the original "3.5+0.5" training program, the internship time has been increased (from the original 0.5 years to the current one year). Three years of study on theoretical knowledge and experimental training in the school, and the final year of graduate production internship, which obviously increased the intensity of practical teaching outside the school. Therefore, how to do well in the construction of an off-campus practical teaching base is more important, which is worth our discussion and research.

2. CURRENT ACHIEVEMENTS OF THE COLLEGE OF MEDICAL TECHNOLOGY IN THE CONSTRUCTION OF OFF-CAMPUS PRACTICE TEACHING BASES

Based on the actual situation, guided by the "production, teaching and research" between the school and the enterprise, and based on the principle of "mutual benefit and win-win", the medical technology college has carried out the reform of practical teaching and the construction of the off-campus practical teaching base rapidly, and achieved remarkable results.

2.1. A new off-campus practical teaching base has been established as a supplement to the lack of on-campus practical teaching resources.

The leaders of medical technology college conducted a comprehensive examination of the original practice teaching base, canceled a number of internship bases with insufficient scale and insufficient capacity, and upgraded and comprehensively expanded the remaining internship bases, while building a new A batch of advanced practice teaching bases. Medical Technology College now has a total of 17 practical teaching bases for science and engineering. These off-campus practical teaching bases have laid a solid foundation for the successful completion of practical teaching tasks for science and engineering.

2.2. Improving the practice teaching guarantee system to ensure the quality of practice teaching.

The college of Medical Technology has formulated rules and regulations such as the Management System for Clinical Apprenticeship of the college of Medical Technology, the Management System for Graduation Practice of the college of Medical Technology, and the Standards and Management Measures for the Construction of Off-campus Practice Base of the college of Medical Technology (Trial). Through the establishment of the system, the college has strengthened the supervision role of the practice teaching base construction, created a good practice teaching environment for the students, and ensured the improvement of the students' various qualities.

2.3. Promoting the reform of college education and teaching, improve the quality of talents and the overall strength of the school.

In the management and construction of the off-campus practice teaching base, the Medical Technology College also recognized the deficiencies and carried out timely correction and teaching reform to improve the teaching quality. At the same time, the medical technology college hired enterprise experts to guide the teaching, which improved the quality of personnel training.

2.4. The employment competitiveness of students has been improved, and the employment rate of graduates has increased significantly.

The off-campus practice teaching base has a real working environment, and students' ability in the internship process has been greatly trained. At the same time, students also have a certain understanding of advanced concepts, communication skills, advanced technology and the development direction of the industry and it is easier to integrate people into society after graduation. In recent years, the employment competitiveness of students of science and engineering majors in the College of Medical Technology has been effectively developed, and the employment rate of graduates has reached more than 98%.
3. MAIN PROBLEMS EXISTING IN THE CONSTRUCTION OF PRACTICE TEACHING BASE OUTSIDE SCHOOL

3.1. The school-enterprise cooperation agreement signed between the school and the enterprise is too simple.

An enterprise can become an out-of-school practice teaching base of a university. Both parties must sign a school-enterprise cooperation agreement through mutual understanding, inspection, communication, negotiation and other processes, so that they can enter the work of building out-of-school practice bases. The school-enterprise cooperation agreement is a guiding document for the construction of off-campus practice teaching bases, but the contents of some cooperation agreements are too simple, especially the tasks, obligations, and responsibilities of the two sides are more general and not detailed enough, which will bring about future base construction. Larger impact may cause the base construction to float only on the surface [3].

3.2. The management of practice students outside the school is not standardized.

The quality of off-campus practice teaching base construction directly affects the quality of students' practical ability training. Whether the thinking of practice teaching base construction is clear, whether the goal is clear, and whether the management is standardized determines the quality of the practice teaching base construction outside the school. Therefore, construction thinking should be clear, the construction goals should be positioned accurately, and the management of students should not be ignored [4]. However, at present, most schools have not done well in the construction of off-campus practice teaching bases, such as construction ideas, content, and goals. The management of the off-campus practice base construction process lacks standardization, and there is no relatively scientific and reasonable management method, which leads to practical teaching. The chaotic construction and management of the base have seriously affected the quality of practical teaching.

3.3. The quality of teachers in practice teaching bases outside the school varies

The requirements for academic qualifications and degrees of teachers in applied undergraduate medical colleges are relatively high, while young and middle-aged employees in enterprises have relatively low academic and degree requirements, relatively weak teaching abilities, uneven levels, and uneven teaching levels.

3.4. Funding for the construction of off-campus practice teaching bases is not good

How much the school invests in funds is directly related to the quality of the construction of off-campus practice teaching bases. In order to ensure that students can normally intern, they must invest enough funds. Under normal circumstances, enterprises need to invest a considerable amount of capital to carry out normal production, and schools also need to invest a certain amount of funds to build off-campus practice bases. Otherwise, the construction of practice teaching bases will be difficult to carry out, and students' practical ability will also be difficult to improve. However, the enrollment of students in colleges and universities continues to expand, and the number of off-campus practice teaching bases is also growing. The school has obviously insufficient funding for the construction of each base. If the investment is not guaranteed, the normal learning of the students cannot be guaranteed, so the effect of practical teaching will be significantly reduced. Furthermore, insufficient funding is not conducive to the stability of cooperation between schools and enterprises [5-6].

4. DISCUSSION ON THE CONSTRUCTION OF PRACTICAL TEACHING BASE OUTSIDE THE SCHOOL


Large professional enterprises with professional counterparts, standardized management systems, strong strengths and development potential are the key selection targets for off-campus internship training bases. Enterprises with high demand for talents and strong development potential who can provide "internship with employment" positions are preferred. While solving the students' production internship tasks, they also solve the employment problems of students.

4.2. Signed a cooperation agreement for off-campus practice bases.

The primary condition for the construction of off-campus practice teaching bases is that both sides of the school and enterprise must sign an off-campus practice base cooperation agreement. Our hospital has signed a cooperation agreement with Shanghai Lianying Medical Technology Co., Ltd. Although the terms of the agreement are slightly simple, they basically clarify the tasks, obligations and responsibilities of both parties, which has laid the foundation for the smooth construction of the practical teaching base. The cooperation agreement is the basis for the construction of a practical teaching base outside the school, and both parties should sign and
implement it carefully and carefully so as to ensure the smooth progress of the base construction.

4.3. **The construction goal of the off-campus practice teaching base is clear.**

The off-campus practice teaching base undertakes the graduate internship tasks of our science majors and engineering majors. While cultivating professional talents for the development of enterprises, the school can also promote the mutual development of mutual teaching, scientific research and industry-university cooperation through exchanges and cooperation between schools and enterprises. Strive to build the enterprise into a school's brand practice base, the two sides strengthen cooperation and jointly cultivate talents.

4.4. **Rely on the platform of off-campus practice teaching base to promote in-depth cooperation between schools and enterprises.**

Enterprises should conduct in-depth exchanges and cooperation with school experts on technical difficulties encountered in the production process, jointly carry out scientific and technological research and development, use the enterprise as a second laboratory, and transform the latest scientific and technological achievements through the enterprise. The college can jointly formulate a talent training plan based on the professional setting situation, combined with the needs of corporate talents, and jointly set up courses between schools and enterprises. The enterprise selects technicians or managers with rich practical experience to teach or give lectures to students at the school. The enterprise selects excellent instructors to jointly guide students' practical learning and graduation thesis, to ensure that students have double-mentor guidance and management in the practical teaching link, so that students can apply the theoretical knowledge they have learned to social practice and enhance their abilities and successfully graduated. Deepen the content of school-enterprise cooperation and achieve a true "order-style" training. Enterprises can select talents according to their own needs, and students can go to work after graduation, and truly achieve a win-win situation for schools, students and enterprises.

4.5. **Teaching quality assurance at off-campus practice teaching bases.**

According to the requirements of production internship, graduation internship, graduation design, and syllabus, the Medical Technology College formulates teaching and internship plans in combination with the actual situation of off-campus practice teaching bases. The enterprise instructor needs to complete the teaching instruction record every month and submit it to the relevant departments of the Medical Technology College for review. After the end of the internship period, the enterprise will carry out the assessment of the production internship stage for the students. Sign and seal it to recognize the student's internship process.

5. **CONCLUSION**

Off-campus practice teaching is an important link for general medical colleges to cultivate application-oriented talents. Strengthening the construction and management of off-campus practice teaching bases has an important role in cultivating students' perceptual knowledge of professional knowledge, improving employment competitiveness and innovative spirit. The level, scale and level of the construction of off-campus practice teaching bases have an important influence on practice teaching. Strengthen the construction of practical teaching bases for applied undergraduate medical schools, realize the complementarity of resources between the internal experimental training base and the external practical training base, and provide a practical platform for students to enter the society to improve their practical ability and professional quality. Through the integration of high-quality teaching resources inside and outside the school, an internal and external internship base is formed to coordinate, orderly and develop together, and to improve the practical ability, innovation and entrepreneurship and employability of college students.

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