

#### **Research on the Functional Construction of Vocational Medical**

#### **Technology Training Bases**

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*Abstract:* The construction of practical education bases in the construction of medical colleges in vocational colleges is an important way to meet the teaching requirements of medical courses and reflect the comprehensive practical education ability of vocational colleges. For medical students in vocational colleges, the improvement of practical ability is also an important way to continuously enhance and improve their professional and technical abilities. This article analyzes the construction of relevant training bases in the field of medical imaging, and explores the scientific methods for teaching and constructing traditional Chinese medicine imaging professional bases in vocational colleges through four typical paths: basic construction of practice bases, effective management of practice bases, targeted practical abilities, and professional skill training for cultivating teacher teams.

Keywords: Vocational Colleges; Medical Imaging Major; Construction of Training Base

#### **1. Introduction**

In medical majors of vocational colleges, the study of medical imaging requires students to accumulate practical experience, and accumulate certain experience in the treatment of related diseases through continuous observation and learning of different types of imaging and disease diagnosis materials. The construction of the training base also requires teachers to combine the specific requirements of medical imaging related courses and improve their personal abilities and qualities in a targeted manner, in order to provide assistance for better utilizing the practice base to carry out medical imaging course teaching.

## 2. The importance of constructing practical bases for medical imaging technology in vocational colleges

## 2.1 Meeting the actual requirements of medical teaching infrastructure construction in vocational colleges

In the curriculum teaching of medical majors in vocational colleges, the construction of practical bases has always been a very important requirement in the infrastructure construction work of vocational colleges. It is also an important method to demonstrate the completeness of infrastructure construction in vocational colleges. The theoretical knowledge related to imaging technology in medical majors is relatively more complex and comprehensive, which means that the process of practical learning requires higher time costs and difficulty. In this situation, it is even more necessary for vocational colleges to strengthen the construction of relevant practical bases from the perspective of medical imaging majors in terms of infrastructure construction and innovation of practical training bases<sup>[1]</sup>. This not only provides more sufficient practical resources for the learning of medical imaging courses, but also means that the infrastructure construction based on practical training in vocational colleges has been further improved in terms of completeness and effectiveness. This has very important practical significance for improving and optimizing the teaching effectiveness of medical courses in vocational colleges.

# 2.2 Meeting the specific requirements for practical learning in the field of medical imaging

From the perspective of learning and practice in medical imaging related courses, the mastery of different imaging devices and corresponding imaging technologies is a key issue that needs to be paid attention to in the practical learning process of this course. From a practical perspective, the corresponding technologies and equipment in the learning of medical imaging majors will constantly change based on the development of technology and system updates. Only by continuously following up on the application of advanced technological equipment from a practical perspective and increasing the practical learning efforts in the school education stage, can students be more effectively familiar with and grasp the scientific methods of new equipment and technology in practical applications. For students, this is also a scientific way to improve the learning effectiveness and quality of medical imaging courses based on school education. As long as schools can introduce advanced equipment and technologies that match the theoretical knowledge content of medical imaging majors and improve the construction quality of practical bases, the functions of practical base construction can be fundamentally reflected<sup>[2]</sup>.

# 3. Analysis of key points in the construction of medical imaging training base3.1 Fully considering the reasonable reserve of cost resources in vocational colleges and planing the construction of practical training bases

In the construction of the training base of medical imaging specialty, it is inevitable to introduce some professional equipment and technology. Based on different functional characteristics and image shooting resolutions, the equipment of medical imaging specialty also has differences in precision and progressiveness. This will result in cost expenditure differences for related equipment. Therefore, in the process of building a medical imaging training base in vocational colleges, it is necessary to reasonably select practical base construction materials and resources based on the cost, funds, and resource reserves of the school, introduce relevant equipment and technology, and provide support for building a scientific practice base that vocational colleges can undertake their operation and management. In addition, in terms of overall planning of practical bases, teachers and managers of vocational colleges also need to strengthen the scientific nature of macro planning in the planning and construction of practical bases based on the teaching requirements of medical related courses, and carry out reasonable and comprehensive planning for the construction projects within the base and the equipment and technology that need to be introduced. The implementation of planning work lays a solid foundation for further achieving good practical base construction results.

#### **3.2** Actively introducing external resource conditions to provide support for the construction and improvement of practical bases

The support role of external resources is more significant and targeted, especially for the teaching of medical majors. External resources have a more significant guiding role in practical education. In addition to completing the construction of medical imaging professional bases based on the established resource conditions of vocational colleges, in order to fully ensure the quality of the construction of practical bases and continuously improve the functional modules of practical bases. Vocational colleges can also learn from project teaching methods or school enterprise cooperation models, increase the construction of professional courses or publicity and promotion efforts, and actively introduce resource conditions from enterprises and hospitals at the social level, in order to actively establish good cooperative relationships with enterprises and hospitals and provide important support for the construction of more advanced and comprehensive training base resources.

### 4. Analysis of the construction path of practical teaching bases based on medical imaging majors

#### 4.1 Strengthening the infrastructure construction of medical imaging practice bases

The infrastructure construction of the practice base refers to the construction and improvement of the macro environment. In addition to strengthening the infrastructure construction of the medical imaging practice base in terms of objective geographical location selection and overall scale planning, targeted infrastructure construction also includes meeting the specific needs of medical imaging professional practice learning and strengthening the pertinence in equipment introduction planning and overall practice base construction planning. We should set up practical bases in different regions based on specific medical imaging courses, and provide more targeted practical learning conditions for vocational college students by improving the corresponding environmental conditions of the practical bases.

## 4.2 Enhancing the management of practical bases and maintaining their functional effectiveness in specific teaching applications

In addition to the maintenance and management work based on the infrastructure of the practice base mentioned above, in order to ensure the stable operation and application of the medical imaging professional technology practice base, teaching management personnel also need to combine the teaching requirements of relevant professional courses and establish normative rules and institutional requirements for the application of the practice base in daily management work, providing important basis for the implementation of specific practical work. For grassroots educators, the maintenance and management of practice bases and the formulation of relevant management systems are also a very important part of their work. From the perspective of teachers' educational management and teaching guidance, a reasonable practical base application system and process can also help them clarify the direction and sequence of practical education work based on the theoretical learning process and corresponding learning stages of medical imaging profession based on actual situations plays a very important role in achieving practical teaching results. In the process of formulating and implementing the system, teachers need to pay attention to certain flexibility in the formulation of the system and the application standards of the practice base based on the differentiated practical learning needs of different students, in order to avoid overly fixed systems that affect students' active application of the practice base to improve their personal practical learning ability.

### 4.3 Carrying out targeted practical education guidance and playing a positive role as a practical education base

Targeted practical education guidance is based on specific courses in the field of medical imaging, which provide support and assistance for students to improve their practical abilities through a combination of theory and practice. For example, the operating procedures and parameter adjustment methods of different types of equipment in the medical imaging profession require teachers to combine theoretical knowledge with basic principles, and by entering practical bases to demonstrate and guide students, help them master practical operation methods in this area and possess corresponding practical operation abilities.

#### 5. Conclusion

Through the analysis of this article, it can be concluded that the construction of practical training bases is a scientific way to achieve good results in practical teaching and improve the quality of corresponding teaching work in the teaching of medical courses. Especially for the teaching of medical imaging technology courses in vocational colleges, the implementation of practical work and the construction of corresponding bases are important paths to ensure the quality of related course teaching and improve the teaching content of related courses. Both management personnel and education and guidance personnel for core courses should fully play their active role in providing important support for the construction of training bases for related professional courses.

#### References

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