

Practice and Discussion on Core Course Construction of Medical Imaging CT Based on Working Process

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Abstract: Owing to the fast progress of social economy, medical and health undertakings have made great progress, and the demand for high-tech and skilled medical talents is more urgent. Higher vocational medical colleges need to foster high-quality practical talents suitable for social needs. In the teaching activities of higher vocational colleges, we should apply the working process teaching mode, optimize the teaching content, highlight the key points of CT clinical operation, and strengthen the construction of medical imaging CT core curriculum, so as to increase the teaching level and promote the construction and development of disciplines. This paper expounds the connotation of working process teaching mode, analyzes the advantages of working process teaching mode in medical curriculum construction, and explores the practice of medical imaging CT core curriculum construction based on working process.

1. Introduction

CT course is the core course of medical imaging technology specialty. The training goal of this professional course is to train practical talents who have good professional ethics and quality, master the relevant theoretical knowledge and technology of medical imaging, and be able to develop the primary function of equipment. In the process of core course construction, CT course focuses on combining with the actual clinical needs, constantly optimizing and improving the teaching content and teaching resources, and forming a full-time and part-time teaching team, so as to effectively enhance the quality and effect of teaching.

2. Connotation of Working Process Teaching Mode

The teaching mode of working process is to create a certain working situation for students when teachers carry out teaching activities. The teaching content is related to the work task, so that the teaching and work can achieve zero-distance docking, and the working process can be integrated into the education and teaching activities. Working process is a teaching mode guided by vocational education process and directed by work task. The goal of medical imaging CT core course is to provide technical support for students to learn professional courses, which is greatly technical^[1]. The theoretical knowledge in this course mainly provides the basis for practical operation, and the

purpose is to apply it in practical work. In the construction of related courses, higher vocational colleges should fully consider the characteristics and thinking habits of higher vocational students, combine with the growth law of technical talents, and put imparting knowledge and training technical skills in the same important position. In the course setting, we should reasonably arrange the teaching of theoretical knowledge and task teaching, appropriately reduce the class hours of theoretical knowledge, and focus on the learning of task. Through the application of working process teaching mode, students can deepen their understanding and cognition of theoretical conclusions, improve their ability to deal with problems, master the specific operation of relevant instruments in practice, make the learning process interesting, enhance students' interest in learning, help students lay a good technical foundation, and promote students to quickly adapt to work.

3. Advantages of Working Process Teaching Mode in Medical Curriculum Construction

Working process teaching mode is based on professional tasks, guided by working process and in the form of project teaching. This teaching mode promotes the reform and innovation of vocational education teaching mode in China and has great advantages in education and teaching

Firstly, the teaching mode is more suitable for the curriculum construction of medical higher vocational students. The teaching mode of working process is to connect the teaching content with the work task. In this mode, when designing teaching activities, we should comprehensively consider the students' career development and the post needs of enterprises. The working process teaching mode is to decompose the real work tasks according to the steps, and then reorganize them in the teaching process^[2]. For applied talents, only by mastering enough knowledge can they meet the needs of the society. When applying the teaching mode of working process, teachers should carry out teaching simulation according to the specific working process of students' future jobs, and develop information-based online and offline courses by reconstructing the situation of working process. In this process, the total amount of knowledge has not changed, but through the deconstruction and reconstruction of the whole knowledge, the ranking and quality of knowledge have changed. Because this teaching mode is a teaching activity simulating real work tasks, it can stimulate students' learning enthusiasm. Using the working process to explain and guide the operation steps in teaching can transform the boring theoretical knowledge learning into interesting operation training, which is more suitable for the learning characteristics of higher vocational students. Through the decomposition and reconstruction of the task, the knowledge is connected together, so that students can improve their professional ability in the process of completing the task. Therefore, the working process teaching mode is more suitable for vocational students with flexible thinking and poor language understanding ability, and more suitable for the curriculum construction of medical vocational students.

Secondly, the teaching mode provides the possibility for the teaching reform of medical higher vocational education. In recent years, in order to standardize the medical diagnosis and treatment services, the state has carried out hierarchical management of the medical structure, and the treatment means and programs have been strictly controlled and restricted. The complexity and variability of medical staff's work content are reduced, and the task and process can be seen from the clinical. This situation makes it possible to connect the medical teaching process with the doctors' working process. Therefore, it is possible to carry out the curriculum reform in medical higher vocational education by working process teaching mode.

4. Practice of Medical Imaging CT Core Course Construction Based on Working Process

In the construction of medical imaging CT core course, we should first optimize the teaching content, correctly understand the relationship between CT clinical operation and imaging principle,

equipment structure, etc., and highlight the key points of CT clinical operation^[3]. Then, we should rely on the cooperation between school and enterprise, set up a high-level teaching team to jointly carry out classroom teaching, training project development and other activities. Finally, we can reorganize the teaching content and assess the learning process.

4.1 Make in-Depth Research to Know the Needs of the Industry and Develop Reasonable Curriculum Standards

During the process of constructing the core course of medical imaging CT, the teaching team should go deep into the enterprises and hospitals to understand the post talent demand of the medical industry. It is necessary to discuss with relevant technical personnel and experts, analyze the job tasks of professional posts in detail, make clear knowledge objectives, skill objectives and task objectives of the course, and then summarize the corresponding ability requirements according to the specific objectives. After the completion of these tasks, we can formulate the core curriculum standards of CT, make the standards more targeted, foster students' professional ability, promote students to develop good professional quality, so as to make them adapt to the post work faster after graduation.

4.2 Combine Theory Teaching with Practice Teaching and Enhance Students' Skill Level in an All-Round Way

When carrying out classroom teaching, teachers should actively explore scientific and reasonable teaching mode, and integrate the working process teaching mode into the actual teaching. In the process of practical teaching, we should combine theory teaching with experimental practice organically, apply theoretical knowledge to specific practice process, make theoretical knowledge and experiment operation interpose in the task, help students to grasp the key and difficult points of theoretical knowledge faster, and find out problems in the process of work. Through this mode, the relevant knowledge points are summed up. Through the application in practical work, students can deepen their understanding of knowledge, effectively solve the disconnection between CT teaching and reality, so as to achieve the teaching objectives.

4.3 Strengthen the Construction of Teaching Materials by Combining Full-Time Teaching with Part-Time Teaching

In order to realize the core course construction of medical imaging CT, we must do a good job in the construction of teaching materials, which is a crucial basis for the course construction. Through the combination of full-time and part-time, we can learn from the industry experts, set up a course writing team to compile teaching materials, and improve and optimize the training project. For example, we can compile the theoretical teaching and experimental manual of CT technology and equipment^[4]. In the process of compiling theoretical teaching materials, we should combine with the needs of the industry, highlight the application and development of medical CT technology and equipment on the basis of basic knowledge and ability, and emphasize the introduction of representative CT products and new technologies, so as to make the completed teaching materials have applicability, innovation and predictability. The theory textbook contains all the knowledge points of CT course, mainly including the structure, principle and quality control of CT equipment. The operation standard of CT in clinical application is specified in the experimental manual of CT technology and equipment, fully in line with the teaching standards and norms.

4.4 Design the Teaching Content Skillfully According to the Working Process of the Project to

Make the Students Meet the Needs of the Post

In the actual teaching, we should design the project teaching content skillfully according to the future job needs of students. Based on the working process teaching mode, we should highlight the theoretical knowledge and technology needed in the actual working process. Through the introduction, discussion and induction of relevant knowledge points, students can deepen their understanding and cognition of knowledge, and then master these knowledge flexibly through the application process. CT course includes the principle of CT imaging, CT scanning technology, CT image processing and maintenance modules. The learning content, learning objectives and operation process of each module are specifically designed. Through these, students can deepen their understanding and mastery of CT, so as to effectively enhance their practical skills. In carrying out teaching activities, teachers should teach difficult concepts in simple terms, let students grasp the basic knowledge of CT, make in-depth analysis of CT new technology principle, strengthen the daily operation training, and constantly improve the level of students' operation skills.

4.5 Fully Use Advanced Information Technology to Improve Classroom Teaching Effect

Based on the working process teaching mode, teachers should actively apply advanced information technology, establish the course website, upload the course construction and related materials to the website, and provide students with rich teaching resources. By means of multimedia teaching, teachers can intuitively display the theoretical knowledge to students, so that students can better understand the imaging principle. In the implementation of experimental courses, the real scene and work simulation can be combined to complement each other. Through repeated practice of simulation software, students can effectively enhance their practical skills and lay a good foundation for practical work.

5. Conclusion

To sum up, the working process teaching mode has unique advantages. The application of working process teaching mode in the construction of medical imaging CT core curriculum can promote the stable progress of professional construction. The construction of CT course can significantly improve the effect of classroom teaching, foster high-quality applied talents and meet the needs of modern social progress.

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