

Research on the Application of Information Technology in Nursing Teaching in Higher Vocational Colleges

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Abstract: Information technology plays an important role in nursing teaching, which can improve the teaching effect and students' learning interest. However, at present, there are still some problems in the application of information technology in the teaching of nursing specialty in higher vocational colleges, such as insufficient understanding of information technology between teachers and students and insufficient teaching resources. Therefore, it is suggested to strengthen the training and learning of information technology for teachers and students, and provide more teaching resources to promote the application of information technology in the teaching of nursing specialty in higher vocational colleges.

Keywords: Higher Vocational Nursing Major; Information Technology; Application Analysis

1. Problems in the application of information technology in the teaching of nursing specialty in higher vocational colleges

In the teaching of nursing specialty in higher vocational colleges, the application of information technology may face the following problems:

(1) Equipment and software update and maintenance

Due to the rapid development of technology, teaching equipment and software need to be constantly updated to stay abreast of the latest technology. However, updating equipment and software can take a lot of money and time. Technical failure and maintenance, information technology equipment and software may fail, require timely repair and maintenance, may cause disruption or delay in teaching, affecting the learning effect of students.

(2) There are differences in students' ability to use information technology

Students differ in their proficiency in information technology due to their own lifestyle or family circumstances, and some students are confused or unfamiliar with the use of specific software or equipment, requiring additional training and support to improve students' technical skills.

(3) Teacher training and support

Teachers need to be able to use information technology to teach. However, some teachers lack relevant training and support, which makes it difficult for them to use information technology in teaching, and requires more energy and time than others in preparing lessons and in the classroom.

(4) The matching of teaching content and technology

The application of information technology needs to match the teaching content to achieve better teaching effect. However, sometimes the content does not exactly match the available technology, which requires adjustments or finding alternatives ^[1].

(5) Privacy security issues

In information technology applications, personal and sensitive information may be at risk of disclosure and misuse. Therefore, appropriate security measures need to be put in place to protect the privacy and data security of students and faculty.

(6) Resource limitation

Information technology applications may require significant resources, including equipment, software, and networks. However, some schools or educational institutions face limited resources and are unable to provide adequate support and facilities.

(7) Student dependence problem

Over-reliance on information technology may lead to students losing interest or ability in traditional ways of learning, which will affect the cultivation of students' comprehensive ability and practical skills.

2. The application of information technology in nursing teaching in higher vocational colleges

2.1 Application of electronic medical record system

It is an effective method to introduce electronic medical record system in nursing teaching. Through the system, students learn how to record important information such as a patient's condition, care measures and outcomes. This application can help students obtain and manage patient information more conveniently, so as to improve the efficiency and accuracy of nursing work. First, students learn how to record a patient's condition through an electronic medical record system. They learn how to describe in detail a patient's symptoms, signs, and disease progression. Through the classification and labeling functions of the system, students organize and present this information more clearly, making it easier to understand and analyze^[2]. Second, students learn how to document care measures. Learn how to accurately record the time, method and effect of nursing operations such as drug administration, dressing change, and turning over. Through the reminder function of the electronic medical record system, students can know the time and content of the next nursing measure in time, so as to arrange their work better. In addition, learning how to record the nursing effect, evaluate the change of the patient's condition, the effect of nursing measures and the patient's response, using the chart and statistical function of the electronic medical record system, students can more intuitively understand the changing trend of nursing effect, so as to adjust the nursing plan in time.

2.2 The application of virtual simulation technology

Virtual simulation technology can provide highly realistic nursing scenarios, so that students can practice in a simulated environment. Students use virtual simulation technology to practice various nursing operations, such as giving patients injections, changing dressings, and measuring vital signs. Virtual simulation technology can simulate real patient reactions and changes in condition, allowing students to adjust care plans and respond to emergencies in a timely manner. Through virtual simulation technology, students conduct practical operations in a safe environment, avoiding harm or adverse effects on real patients. Students repeatedly practice and adjust operational skills to improve their skill level and quality of care. Virtual simulation technology also provides real-time feedback and assessment to help students identify and correct errors and further improve their nursing abilities. In addition, virtual simulation technology will provide a variety of nursing scenarios, including patients of different ages, genders, and conditions, allowing students to be exposed to a wider range of nursing situations, increasing their experience and coping ability. Virtual simulation technology combined with other teaching means, such as textbooks, case analysis, etc., to provide a full range of nursing teaching. In short, the application of virtual simulation technology in nursing teaching can provide a safe, efficient and diversified practical operating environment, help students improve their skills and ability to cope with emergencies, and lay a solid foundation for their future nursing work^[3].

2.3 The construction of distance education platform

In the teaching of nursing specialty, the transmission of teaching resources can be realized by building a distance education platform. First of all, we can use network technology to upload the teaching content to the platform in the form of multimedia, including courseware, teaching video, experiment operation and so on. Students can learn online through the

distance education platform, access to teaching resources anytime and anywhere, and improve the flexibility of learning. Secondly, the platform can provide communication and discussion between students. Students can share their learning experiences and answer questions through the online discussion area to promote learning interaction. Teachers can also communicate with students online through the platform, answer questions and provide guidance. Teachers can publish and manage teaching resources through the distance education platform, including uploading courseware, assigning homework, correcting homework, etc., to improve teaching effect and management efficiency. In short, through the construction of distance education platform, nursing teaching can be realized online, improve the flexibility and interaction of learning, and improve the teaching effect and management efficiency.

2.4 Application of nursing information system

When teaching the curriculum, the use of nursing information system is included in the core curriculum of nursing profession. Such as nursing information management, nursing data analysis and so on. Through the systematic teaching content, students can learn how to use the nursing information system for disease assessment, nursing planning, nursing records and nursing evaluation. Practical operation training, to provide students with practical nursing information system operation training opportunities. For example, in a laboratory or clinical practice, students use real-world nursing information systems for patient information management and analysis. Through practical operation, students are familiar with the interface and functions of the system, and improve their operational skills and information management ability. The case analysis and discussion can also be introduced into the case analysis and discussion of the nursing information system, so that students can analyze the real nursing situation and data and use the nursing information system for information management and analysis. Through case analysis and discussion, students will deepen their understanding and application of nursing information system, and develop their ability to analyze and solve problems. Real-time guidance and feedback, using the real-time nursing information system to provide students with real-time nursing guidance and feedback. For example, when students perform nursing operations or records, the system can immediately provide correct operation guidance or evaluation feedback to help students correct mistakes in time and improve the quality and safety of nursing work. Through the application of the above methods, nursing information system plays an important role in nursing teaching, helping students to fully understand the patient's condition and nursing needs, improving the quality and safety of nursing work, and promoting the improvement of students' professional ability.

3. Conclusion

Through the application of information technology, teaching effect can be improved, students' knowledge horizon can be broadened, and students' information literacy and innovation ability can be cultivated. However, the application of information technology also faces some challenges, such as the shortage of teachers' information technology ability and teaching resources. Therefore, it is necessary to strengthen teachers' information technology training and provide more teaching resources to promote the effective application of information technology in nursing teaching in higher vocational colleges.

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