Received: 15 Jan. 2022 | Revised: 28 Jan. 2022 | Accepted: 23 Feb. 2022 | Published online: 30 Mar. 2022

RESEARCH ARTICLE

# Discussion on the Teaching of Medicine Storage and Maintenance in Higher Vocational Colleges

Contemporary Education and Teaching Research
2022, Volume 3(1)17-19
DOI: 10.47852/bonviewCETR2022030103


**Li Hu**[1,*]
[1]*Department of Light Chemical Engineering, Hubei Light Industry Technology Institute, Wuhan, China*

**Abstract**: Higher vocational colleges are the main education bases for cultivating skilled talents for the society. We should constantly strengthen the construction of teaching methods and teaching resources, and comprehensively promote the cultivation of skilled and practical talents. *Drug Storage and Maintenance* is a professional required course for pharmaceutical majors in higher vocational colleges, which has important guiding significance for students to engage in drug research and development, drug production and drug marketing after graduation. Therefore, the teaching quality of *Drug Storage and Maintenance* is particularly important. This paper discusses the course teaching from the aspects of training objectives, training base, virtual simulation training system, learning software management and teaching methods.

**Key words**: drug storage and maintenance, training base, virtual simulation training system, learning, teaching methods

## 1. Introduction

*Drug Storage and Maintenance* is a new comprehensive technical discipline with strong applicability and practicality. It mainly focuses on the application of drug storage and maintenance knowledge and the training of practical skills, so that students can master the basic knowledge of drug storage and maintenance theory, relevant laws and regulations, drug storage operation flow, job functions, etc., and cultivate post-skilled talents for the pharmaceutical industry. At present, classroom teaching is the main method in the teaching of *Drug Storage and Maintenance* in most higher vocational colleges, and there is little practical training, which leads to students' poor interest in learning, low knowledge mastery rate and weak practical ability. Therefore, based on the above situation, this paper will discuss and analyze the teaching of *Drug Storage and Maintenance* in higher vocational colleges as follows.

## 2. Training base

At present, most higher vocational colleges have realized the importance of practice, that theory is not the only focus, and that the improvement of practical education level can not be separated from the construction of practical training base. Training bases are divided into on-campus training bases and off-campus training bases. The campus training base is mainly a variety of laboratories and training rooms. The campus training base is the embodiment of teaching integration, which can form a vocational skills training center integrating teaching, practice and service. Off-campus training bases are generally based on high-quality enterprises and relying on the school-enterprise cooperation model, which is an important way for schools to strengthen connotation construction and improve the soft power of running schools. Through continuous innovation of school-enterprise cooperation mode and joint construction between schools and enterprises, the teaching classroom will be set up in the R&D base with high-tech equipment, the production workshop with high standard demonstration and the enterprise practice teaching base, so that the high-quality resources of enterprises can enter the classroom, so that the classroom can keep up with the development trend of the industry and significantly improve the quality of teaching resources.

In practical training, students can simulate the actual working environment and real work items related to drug

Corresponding Author: Li Hu. Department ofLight Chemical Engineering, Hubei Light Industry Technology Institute, Wuhan, China
Email: 2273627156@qq.com

storage and maintenance, and emphasize that students can improve their professional skills and practical experience through participatory learning. For example, when students are studying the contents related to the process of drug delivery and warehousing, they can arrange students to practice in the school base to truly restore the whole process of drug delivery, acceptance, warehousing, storage and maintenance in the warehouse, delivery inspection and delivery, transportation and distribution, and students can participate in every link of the operation, perform the duties of each post and summarize the matters needing attention in each post. This can significantly improve students' interest in learning and help students quickly turn theoretical knowledge into practical skills. For example, in the process of learning some knowledge about the storage and maintenance of special management drugs, due to the requirements of laws and regulations, in-school training can not realize the training of precision, numbness, poison and release special management drugs, and students can be arranged for off-campus training, which can effectively improve the quality of teaching resources, connect the curriculum content with industry standards and the teaching process with the working process, and truly ensure the quality of talents to meet the needs of enterprises.

## 3. The virtual simulation training system

The construction of training base can effectively create students' practical opportunities and cultivate students' practical skills, but it is not suitable for the teaching of all contents. With the development of science and technology, modern medicine storage and maintenance technology is changing with each passing day, and the construction cost of the base is high, which can not be effectively updated in real time, so the virtual simulation training system that came into being just makes up for this deficiency. The cost of virtual training system is relatively low, the system can be updated regularly, and a set of platform can be used by many people to learn online at the same time. Virtual training system is a multimedia software that integrates teaching, experiment, scientific research and educational resources development by using virtual technology. It can provide students with comprehensive skills training of example demonstration-detailed study-self-practice-online assessment, fully participate in all links of drug storage and maintenance, and simulate storage and maintenance operation training almost truly, so as to deepen their understanding of skills operation. In addition, the general theoretical foundation of students in higher vocational colleges is not solid, and their learning ability is poor. The virtual simulation training system can enable students to watch examples and demonstrate many times, give them enough time to understand the key points of skills, and then practice and consolidate independently until they pass the online examination, which improves the students' knowledge internalization ability, which is difficult for other teaching methods to do. For example, the virtual simulation training system can effectively stimulate students' initiative and initiative, and students can efficiently master their own storage and maintenance points when they independently simulate the storage and maintenance process of different dosage forms of drugs, such as powder, granule, tablet, injection, capsule, syrup and suppository. Then, the virtual simulation training system can effectively help students to establish a knowledge framework system and improve the learning quality by guiding students to sum up the similarities and differences in the storage and maintenance of different dosage forms of drugs.

## 4. Learn software management.

The study of the theoretical basic knowledge of Drug Storage and Maintenance is generally selected by teachers. Traditional classroom teaching has been difficult to catch students' hearts in the information age. Teachers complain that the students are impetuous and unable to sit still, and students feel that listening to lectures is boring and boring, so classroom teaching innovation is extremely important. Learning software is a platform for course learning, knowledge dissemination and management sharing based on microservice architecture, and it is a tool focusing on mobile teaching. PPT courseware is quickly projected, which is convenient for teachers to start classroom teaching. Gestures, photos, location, QR code and other fancy sign-in create a sense of learning ceremony. Intelligent random selection of students in class strengthen effective interaction between teachers and students. Award-winning contest creates a relaxed learning atmosphere and improve students' interest in learning. Discussion stimulates students' learning potential. Group chat interaction, the whole class participation, closes the distance between teachers and students. Students can practice in class, and practice with learning and consolidate theoretical knowledge. Students' voting feedback, and teachers' dynamic adjustment of teaching plan lead to a virtuous circle of classroom teaching. With the addition of intelligent learning software in traditional classrooms, teachers can master the classroom rhythm and break the boring learning of theoretical knowledge. Classroom learning can also be extended to after-class. Teachers can set up

key knowledge modules, knowledge expansion modules and post skill docking modules in the learning software, which can cultivate students' autonomous learning ability and knowledge and skill transformation ability. In fact, not only learning software can improve teaching quality, but with the improvement of information technology, there are many similar applications (apps), which are gradually being recognized in the field of education, providing more methods for educators and creating a colorful learning environment for students.

## 5. Teaching methods

The improvement of classroom teaching is not only the blessing of learning software, but also the improvement of teachers' own teaching ability, in which the choice of teaching methods can affect the classroom teaching effect. Learning from others and choosing appropriate, interesting and efficient teaching methods can achieve the goal of effective teaching. *Drug Storage and Maintenance* is a professional course, and the teaching of the professional course is highly professional, and the characteristics of the subject should be embodied in the teaching process. The characteristic of higher vocational colleges is to cultivate students' ability to use theoretical knowledge to solve practical problems. Therefore, according to different teaching contents, we need to adapt to local conditions and choose appropriate teaching methods to achieve the desired results. On the other hand, in view of the learning characteristics of higher vocational students, teachers should change their teaching concepts, change the teaching methods that require students to use one model and one standard, and try to diversify and multi-level classroom teaching methods, which will help to improve students' learning interest. In addition to the traditional teaching methods such as lecture, conversation (question and answer), demonstration, situational teaching and questioning teaching, the teaching of this course is also suitable for selecting teaching methods such as project teaching, action-oriented teaching, case teaching, task-driven teaching, heuristic teaching and brainstorming.

## 6. Conclusion

In short, with the continuous changes in the pharmaceutical industry, the constant updating of drug laws and regulations, and the constant change of students' thoughts, teachers should update their ideas, learn all their lives, keep pace with the times, increase the frontier knowledge of disciplines, innovate teaching methods, dig deep into Internet teaching software, make the best use of virtual simulation training system and training base, further improve the teaching quality, and cultivate manufacturing talents and talents in higher vocational colleges in the new era.

## Conflict of Interest

The authors declare that they have no conflicts of interest to this work.

## References

[1] Yan Renliang, Zhuang Yixiu. Application of case teaching method in Storage and Maintenance of Traditional Chinese Medicine [J]. Pharmacy Today, 2012, 22(2):2.

[2] Li Yunlan. Talking about the classroom teaching skills of drug storage and maintenance technology [J]. Health vocational education, 2011(20):98-99.

[3] Ouyang Hui. Application of questioning teaching method in medicine storage and maintenance course [J]. Occupation, 2014(27):2.

[4] Zou Ning. Discussion on the application of questioning teaching method in medicine storage and maintenance course [J]. 2020.

[5] Wu Jie. Application of simulation teaching method in practical teaching of "Drug Storage and Maintenance" course [J]. Knowledge Guide, 2016(7):2.

[6] Zhang Juan. Teaching reform and practice of drug storage and maintenance [J]. 2020.

[7] Chen Xiaoyan, Jie Shen. Talking about the reform of higher vocational teaching methods based on the cultivation of innovative ability [J]. Journal of Changchun Institute of Education, 2013(21):2.