

Exploring the Reform of Practical Teaching of Medicinal Botany to Enhance the Ability of Drug Knowledge in Chinese Medicine

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Abstract: Based on the analysis of the disciplinary characteristics of medicinal botany, and after years of teaching experience and student feedback, a comprehensive reform and analysis of the practical teaching system of medicinal botany is needed. In the specific work process, on the one hand, the traditional learning concept needs to be analyzed, and at the same time, based on the verification experiments as an important pattern, in the way of constructing a basic experimental technology, to achieve a good analysis and processing of experimental content. In the analysis of this paper, the reform of practical teaching of medicinal botany to enhance the ability of drug literacy in Chinese medicine is mainly elaborated.

Keywords: Medicinal botany; Teaching reform; Traditional Chinese medicine

1. Introduction

Medicinal botany has always been an important basic course for Chinese medicine majors, which is a kind of disciplinary work that concentrates botanical knowledge and methods on botany. It is also an important foundation for the study of biological medicine, herbal medicine identification and various disciplines, and therefore needs to be reformed and optimized.

2. Teaching Background

Experimental teaching is a very important part of the university teaching system, which plays an important role in cultivating students' hands-on ability, innovation ability and comprehensive quality improvement. The level of the experimental teaching process is directly related to the important way of training talents, and also plays a good effect on whether the talents can adapt to the social development after graduation. In the teaching process of medicinal botany, experimental home occasionally and field practice are very important practical teaching methods. The teaching requirements also cover the different aspects of experimental teaching and field practice, so that the teachers' teaching links should be guaranteed to highlight the disciplinary characteristics of medicinal botany, so as to lay a good foundation for students to learn biology and herbal identification. The specific teaching process of teachers, using systematic practical guidance of medicinal botany, not only strengthens students' mastery of theoretical knowledge, but also plays a corresponding role in enriching the scope of cognition, developing practical skills and many other aspects of ability. This is a good teaching effect to deepen students' theoretical knowledge and enrich the cognitive scope^[1].

In the development of teaching, in order to realize the practical teaching method, highlight the professional training objectives, and strengthen the skills training method, it is necessary to further improve the comprehensive ability of students, so that the course has a strong vocational, technical and practical effect. In the future teaching, based on the traditional verification test method, students obviously can not discover the knowledge points well, and often feel the boring problems, which is not conducive to training students to form creative thinking, but also can not be more comprehensive focus on problem solving. Therefore, it is necessary to reform the teaching methods in the future development of teaching.

3. Teaching Status

3.1 Basis of Experimental Content

In the design of the experimental content of medicinal botany, basically it is to verify the theoretical knowledge, while using various types of experimental training such as the observation of plant cells, tissues and organs, so that students can improve their operational skills, the use and protection of microscopes, as well as the production of microscope slide, etc. The way of teaching does not allow students to form a strong ability to find problems in time in the learning of experimental teaching. In addition, students' problem solving

and analysis abilities are not sufficient, which leads to the use of knowledge and skills is not comprehensive and reasonable^[2].

3.2 Teaching Methods are not Advanced

In the use of experimental teaching methods, the teacher mainly introduces the experimental purpose, experimental materials, experimental content and test methods, and then the teacher carries out the corresponding experimental treatment based on the various experimental materials prepared by the teacher, although after the teacher has explained the experiment, the students have a certain knowledge of the experiment, but they are always unable to handle the actual operation, based on the specifications and requirements, which leads to The students' motivation is not sufficient, especially in the experimental process, the perfunctory situation is more obvious. In the subsequent discussion and analysis, it does not meet the requirements of teaching and learning^[3].

3.3 Insufficient Practicality of Teaching

The field practice phase of medicinal botany is generally limited to the basic taxonomic level, where the teacher leads students to the practice site and collects and identifies specimens based on fixed routes, making it possible to organize them after returning to the site. In such a traditional teaching process, the pattern of specimen identification assessment is fixed, and students are unable to grasp the comprehensive trait characteristics of plants in a short time, which leads to learning problems.

4. Practical Teaching Reform of Medicinal Botany to Improve the Ability of Drug Recognition in Chinese Medicine

4.1 Optimize the Content

In conducting specific teaching sessions, we should combine the teaching objectives with the actual teaching conditions, and improve and optimize the experimental teaching methods based on different teaching methods.

4.1.1 Basic Experimental Techniques

In this teaching session, it involves the way of teaching the use of various equipment such as microscope usage, clinical slide production, biological drawing techniques and microchemistry methods. Based on the teaching of basic experimental techniques, students need to get proficiency. And in the process of the final experimental assessment, it is also necessary to get the corresponding verification and feedback. In the process of experimental teaching, it is often necessary for teachers to teach first, while students need to verify and analyze afterwards^[4].

4.1.2 Designed Experiments

Conducting a course on basic morphological and structural observations of plant cells requires a targeted pedagogical shift. Although the traditional teaching method can serve to improve students' understanding of the basic knowledge, the single teaching mode can lead to the failure to motivate students. Therefore, in the development of teaching, it is necessary to change the traditional verification experimental teaching method into a design experimental mode. For example, in the composition of the teaching method, students need to pre-test before class, while in the process of class, the teacher uses questions to check the students' pre-test situation, so as to achieve the important and difficult points of the experiment. However, it is important to note that throughout the teaching session, students are also left with sufficient space for learning and thinking, and communicate with each other so that they can use their abilities to solve problems in the experiment^[5].

4.1.3 Integrated Experiments

In the experimental part of plant taxonomy, basic experimental techniques and verification experiments are the main teaching elements. In specific teaching sessions, it is possible to optimize the traditional taxonomic experimental design into a more intuitive and comprehensive way of teaching. For example, students are guided to visualize different types of plant groups and summarize the characteristics of plants, after which they are taken to the field environment for detailed comparative and extended experimental analysis. In this way, students can greatly improve their individual abilities.

4.2 Emphasis on Field Practice

In the past teaching mode, the basic teaching method of teacher leading students and students asking questions to the teacher was basically adopted, and such a teaching evaluation mode was relatively single. The specific operation is single, so that the teaching practice and comprehensive evaluation of the teaching mode need to be formed in the future for teaching optimization. In the specific operation, the teacher should lead the students to observe and describe the ecological environment, and also point out the plants and various forms that are the focus of teaching, and analyze them from the perspective of the morphological characteristics of plants. Second, the focus

should also be on developing students' ability to collect plant specimens, especially to analyze typicality and completeness. In addition, it is also necessary to carry out the follow-up not to love the flat exhibition evaluation, but also correspondingly let the students make the field practice as very important teaching research in order to revenge and, in this way, choose reasonable students fine specimens.

4.3 Improve the Evaluation of Teaching Effect

After the completion of the experimental teaching and field practice teaching, it is necessary to combine the teaching situation, evaluation activities, and the results of the design experiments carried out summary and evaluation, so as to achieve the test skills assessment, so as to provide a good reference for students to understand their own learning situation, as well as in the subsequent learning, to lay a good foundation for subsequent learning, but also correspondingly so that teachers can carry out teaching Experience summary and analysis, to provide students with more comprehensive and reasonable teaching guidance. It will not bring certain negative problems of teaching.

5. Conclusion

To sum up, in carrying out the teaching reform of the practical teaching of medicinal botany to enhance the ability of pharmacognosy in Chinese medicine, it is necessary to combine the current teaching situation and carry out scientific and reasonable teaching guidance from the different stages of teaching experimental links and field practice, so as to maximize the overall level of teaching.

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