Research on Post Curriculum Reform based on Network Teaching Mode

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ABSTRACT

With the rapid development of multimedia technology and network technology, whether theoretical teaching or experimental teaching, network teaching mode has gradually become the mainstream mode of modern education. The teaching means of imparting knowledge through the network can be more flexible. The combination of online and offline can also enable students to better acquire knowledge and exercise their communication and analysis skills at the same time. Based on the course construction of aviation material storage management, this paper constructs a course teaching mode based on network environment. The teaching practice shows that this teaching mode not only improves the teaching quality, but also enhances the learning effect, and lays a foundation for cultivating students' post holding ability.

Keywords: Network teaching; Aviation material management; Network teaching mode

1. INTRODUCTION

With the expansion of the scale of military vocational education and training and the continuous increase of refresher personnel in Colleges and universities, the traditional classroom teaching mode is far from meeting the needs of vocational education and training all kinds of talents at all levels, and network teaching will also become an important platform to improve the quality of vocational education.

As the carrier of network teaching, MOOC course has the characteristics of resource sharing, unlimited time and space, multi-directional interaction and convenient cooperation. It can not only meet the new requirements of post education for both teaching and learning, but also play an irreplaceable role in cultivating applied and compound military talents required by post in the future. Give full play to the respective advantages of network teaching and traditional teaching and make them complementary, establish a teaching mode combining network teaching and traditional classroom teaching, and give full play to its role in teaching. This is not only the change of teaching activities or teaching means, but also the change of teaching ideas. Therefore, in-depth study of the role of network teaching in military vocational education will be of great significance for optimizing the structural system of vocational education and cultivating high-quality military talents. Here are some understandings on the construction of teaching mode of aviation material storage management under the network environment^[1].

2. INTRODUCTION TO THE MAIN COURSE OF AVIATION MATERIAL STORAGE MANAGEMENT

Aviation material warehouse management is a main course with close combination of theory and practice for growing cadres in aviation material management engineering. This course is based on the theory of warehouse management, combined with the characteristics of post, according to the needs of different types of warehouses in the army, and based on the cultivation of aviation material warehouse management ability, further strengthens the combination of management theory and management practice, to improve the ability and quality of students as the evaluation standard. The course mainly has the following characteristics:

(1) In the setting of teaching content system, it closely focuses on the requirements of post training, realizes the "Three Closeness" of teaching content, and meets the requirements of talent training objectives;

(2) The course has rich practical teaching links, including simulation training in the aviation material support training center and visiting and learning in the military practice base. The application of these teaching links will help students to be competent for the actual work of the army as soon as possible and achieve the purpose of being competent as an aviation material assistant after graduation;

(3) In terms of evaluation methods, it mainly adopts theoretical assessment, peacetime performance and practical skill assessment. This diversified assessment method can objectively reflect the ability and quality of students.

3. DESIGN OF THE MOOC COURSE OF A AVIATION MATERIAL STORAGE MANAGEMENT^[2]

Network based course teaching is the extension and expansion of classroom teaching. It must not simply "transplant", "copy" and "apply" the education and teaching mode in the classroom. It must create an application platform with reasonable structure, scientific content, standard and perfect function, and strive to solve the problems of storage, construction, sharing and security of teaching case resources^[3].

3.1. Build The Material Library And Textbook Library Of The Course

Learning resources are the basis of network teaching. Network teaching without resources will become passive water. Only with various resources with full and accurate contents and rich levels can we give full play to the advantages of MOOC class teaching^[4].

According to the construction principles of the above resource database, firstly, the file format and content of a large number of materials are screened, and then various materials are divided into several types such as video, picture and text for uploading, which provides reference materials for students' extracurricular selfstudy and broadening their horizons, as shown in Figure 1 and Figure 2.

The construction of the most basic teaching material library for the course of aviation material storage management includes network teaching materials, electronic teaching plans and teaching materials. At the same time, multiple functional modules are expanded as needed. Network teaching materials and electronic teaching plans are divided according to chapters, and uploaded after being transformed into corresponding web browsing format by software. The teaching material is the video teaching of the lecturer, which relieves the time limit of traditional course learning and widens the learning space of students.



Figure 1 Special mould inhibitor for aviation materials



Figure 2 Picture of "a corner of the fire center of an aviation material warehouse"

3.2. Construction Of MOOC Course With Post Characteristics

According to the course nature and teaching characteristics of aviation material storage management, various materials are widely collected and the teaching content is carefully studied. Based on the teaching platform of "school network teaching application system", the course of aviation material storage management is established, which integrates resource management, system management and teaching support. The course has friendly interface, simple operation, clear navigation and flexible expansion. The basic functional modules of each chapter of the course of aviation material storage management include network teaching materials, electronic teaching plans, teaching materials and thinking questions. The modules of case analysis, expansion lectures, aviation material regulations, academic articles and English Chinese aviation material abbreviations are expanded according



to the needs of the course teaching, as shown in Figure 3 and Figure 4.



Figure 3 MOOC course interface I of aviation material storage management



Figure 4 MOOC course interface II of aviation material storage management

4. CONSTRUCTION OF TEACHING MODE OF AVIATION MATERIAL STORAGE MANAGEMENT

The establishment of MOOC course not only provides convenience for teachers to use the network for multimedia classroom teaching, makes classroom teaching "vivid and colorful", but also creates a healthy network environment for students' autonomous and research-based learning.

4.1. The Key Content Of the Course Is Mainly The Teacher's Intensive Lecture In Class

In the traditional teaching methods, teachers and students are in an interactive state. Teachers can timely adjust the teaching methods and rhythm according to the students' learning situation and expression of classroom teaching content. Therefore, based on the characteristics of vocational education, we adopt the teaching mode of focusing on teachers' intensive lectures for the key and difficult contents in the curriculum standards, that is, teachers use a variety of teaching resources such as network teaching materials, electronic teaching plans and teaching materials built in the MOOC course, as well as various videos, pictures and other materials to teach by means of real cases, inspiration and guidance, It not only enlivens the classroom atmosphere, but also stimulates students to think actively. Through face-toface two-way communication between teachers and students, multimedia information display and network information retrieval, traditional teaching and network teaching are organically integrated, which not only has simulated real scenes, but also has rich information cognition.

4.2. The Understanding Content Of the Course Is Mainly Self-study And Discussion

For the contents required to be understood by students in the course standard, such as warehouse management, the teaching mode of self-study and discussion is adopted. Firstly, the teacher designed the learning objectives, carried out layer by layer under the guidance of the question "why should the reservoir management be carried out", then put forward "what should the reservoir management manage", and finally put the foothold on the question of "how to manage the reservoir management". After logging into the system, students can browse the notice issued by the instructor from the bulletin board and obtain the reference materials provided by the instructor from the recommended materials module. When you encounter problems in your study, you can not only conduct extensive communication among students through the discussion and exchange module, but also use the online answering question module to communicate directly with the teachers. In this teaching process, teachers do not let it go, but should better play a guiding role and give full play to the students' ability of autonomous learning. After the learning process is completed, teachers should refine, summarize and sublimate the teaching content of this part.

4.3. The Expanding Content Of The Course Focuses On Students' Cooperative Learning

Collaborative learning is a small-scale learning method between class collective teaching and students' individualized learning. Because the collaborative learning model has many advantages, such as the discussion and communication between students, which is convenient for the collision and communication of a variety of different views, and can effectively cultivate the cooperative spirit of students working together for the same goal, it has been widely used in the practice of on-the-job training. The teaching content of "anti mildew measures for storage equipment under different climatic conditions (temperature and humidity control)" adopts the teaching mode of students' cooperative learning. Firstly, the students from all over the country are divided into three different regions: the North Sea fleet, the East China Sea fleet and the South China Sea

fleet; Secondly, the students use multimedia network technology and according to the climate characteristics of the region, promote the students of the group to interact and cooperate with the same learning content, so as to achieve a deeper understanding and mastery of the teaching content; Thirdly, each group selects student representatives to explain how to take measures to control the temperature and humidity in the warehouse in a specific climate, so as to achieve the purpose of preventing mold growth, promote students to share information resources, share learning responsibilities, mobilize the enthusiasm and initiative of learning cooperation, develop students' advanced cognitive ability and form students' healthy emotion ^[5-6].

4.4. The Practical Content Of The Course Is Mainly For Students To Visit And Learn

The ultimate goal of aviation material storage management course is to "improve the storage management ability of students", but "it's easy to get on paper, so you must practice it". For the layout of each equipment warehouse, the number of equipment storage shelves, and the management of equipment in and out of the warehouse, students must be led to visit and learn in the military practice base, so as to transform the theoretical knowledge in the textbook into the ability of post holding. After the practical teaching, the students are required to use the learned knowledge and think carefully in combination with the actual cases of the army. Finally, the gained experience is written into an internship report, which is uniformly uploaded to the Internet, so as to facilitate the students to learn from each other, and cultivate the students' practical ability and innovation ability.

5. CONCLUSIONS

Network teaching mode is an open teaching and learning environment. It changes the traditional teaching mode from teacher centered to student-centered, and provides objective conditions for students' active learning and personalized learning. Using modern teaching means and the powerful function of the network, this teaching mode not only solves the problems faced by the course aviation material storage management, such as large amount of information, insufficient class hours and boring teaching process, but also solves the problems existing in the traditional teaching, such as outdated teaching content, single teaching method, backward teaching means and difficult two-way communication between teachers and students, It enriches and optimizes in class teaching, expands and strengthens extracurricular teaching, realizes the first evolution of teaching content, diversification of teaching methods, modernization of teaching means and convenient communication between teachers and students, makes the course teaching full of vitality, and enhances the attraction and appeal to students. Teaching practice has proved that this course teaching mode based on network environment not only effectively improves the teaching efficiency and teaching quality, but also greatly improves the students' learning interest and learning effect of warehouse management course, which is worthy of reference and promotion in the later teaching implementation.

REFERENCES

- [1] Lili Wu, Hongli Teng, Yuqing Xing, et al. Exploration and Research on teaching reform of electronic information specialty under the background of Mu class[J]. University education, 2021.17 (15): 166-167.
- [2] Yuhua Zhang. Research on computer education reform based on network teaching mode[J]. Computer knowledge and technology, 2021.17 (15): 166-167.
- [3] Di Liu. Research on Mu class design strategy[M]. Shanghai Foreign Studies University, 2017.
- [4] Tao Xu, Yu Yu, Qiang Guo. Research on teaching method design of Mu class[J]. Modern education treatise, 2016 (6): 43-49.
- [5] Yuqing Gong, Ying Wang. Research on classroom teaching mode based on Mu course under the condition of informatization[J]. China military education, 2008.20 (1): 87-88.
- [6] Yan Zhou, Yuze Li. Hybrid teaching design and practical application based on Mu class -- Taking taxation as an example[J]. Journal of Heilongjiang Institute of Technology (Comprehensive Edition), 2020.20 (4): 48-52.