

Research on Military Vocational Education Curriculum Design Based on MOOC Model

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Abstract. MOOC has exerted great influence on the teaching of higher education in our country since its birth. Integrating the advantages of MOOC into military vocational education is of great significance for solving the difficult problems of military vocational education and improving the training of military talents in our army. This paper focuses on the curriculum design of MOOC platform construction, and puts forward the applicable principles and methods in the aspects of curriculum resources, teaching interaction, feedback evaluation and data analysis, combining with the characteristics of MOOC, which provides practical suggestions for specific application.

Characteristics of Military Vocational Education

The Focus Goal

The goal of military vocational education is to focus on the information transformation of the army and the preparation for military struggle so as to improve the adaptability of officers and soldiers to their posts as the starting point and the end point. It focuses on improving the military professional accomplishment of officers and soldiers, and emphasizes the quality education in the military field. It is different from the task oriented by improving the post competence and professional competence of officers and soldiers. Vocational education.

The Comprehensive Object

The military vocational education is geared to the broad masses of officers and soldiers, with the cadres as the focus, the soldiers as the main body, and the civilian personnel as the main body. It meets the development needs of all kinds of personnel at all levels. It is different from the localized orientation training for certain specific posts and professional fields.

The Universal Content

As an effective supplement to military academy education and army training practice, military vocational education focuses on the needs of army construction and the personal talents of officers and soldiers, takes learning new theories, equipment, technology and knowledge as the main body, and builds a content system that is generally applicable to the improvement of officers and soldiers' quality, which is different from training specific posts. Professional knowledge, professional skills and professional qualities required by the post-oriented education.

The Flexible Form

Military vocational education emphasizes autonomous learning, distance learning and personalized learning, and gives full play to the advantages of distance education network group

training, which is different from vocational education which focuses on centralized training in Colleges and military camps.

Feasibility of MOOC Model Applied to Military Vocational Education

At present, the traditional way of college education and training is not suitable for the growing learning needs of officers and soldiers. Colleges and universities have educational resources, but limited by the ability of training in schools, it is difficult to provide adequate education services to the army; the army has learning needs, but limited by on-the-job incumbency rate, it is difficult to send large quantities of schools to colleges and universities; the current distance education lacks teacher-student interaction, and it is difficult to effectively mobilize the learning interest and enthusiasm of officers and soldiers to ensure learning effectiveness. Fruit. This practical problem restricts the effective exertion of the function and function of military vocational quality education in Colleges and universities, and becomes the bottleneck of the development of military vocational quality education. It is urgent to seek a breakthrough in the educational model.

The rise of MOOC provides us with a new way of thinking and means. It not only solves the above contradictions, but also saves the resources of education and training, and achieves free learning and teaching according to aptitude.

Expanding the Scale of Teaching

Anyone can choose the way he likes to study at any time and place. Even if the officers and soldiers can not participate in the real-time learning and discussion of the course in time because of duty, training and other reasons, they can also keep up with the progress by watching video recordings after that.

Strengthens the Teaching Management

Many MOOC courses are similar to college semester organizational courses. They adopt the methods of spring, summer and autumn semesters. Students must register and complete the courses within the prescribed time. The students have increased the pressure and motivation of learning, which is convenient for them to study in an organized way.

Maintained Our Enthusiasm For Learning

MOOC course takes knowledge points as units, and uses "micro-video" about 3-15 years to impart knowledge. The content is short and concise, and the theme is prominent. Without the fear of "big heads", it is easier to attract large numbers of students to participate. The application of MOOC in military vocational education is more in line with the actual situation of "fragmentation" of grass-roots officers and soldiers'time. It will be easier to organize, more effective and better than the traditional centralized professional training.

Highlighting the Guidance of Teachers

MOOC teaching highlights the role of teachers, using teacher-guided teaching methods, teaching practice, homework, testing, etc. Teachers regularly go online to answer students'general concerns, so as to solve the problem of diversity and personalized needs.

Strengthened Teaching Analysis

MOOC platform has innate advantages. Every click, communication, learning time and duration of officers and soldiers are recorded. By accumulating massive, accurate and real-time data of officers and soldiers'learning behavior and ability and quality, and using big data analysis technology, teachers can clearly know the key points, difficulties and existences of students' attention. In order to constantly adjust the teaching content, methods and means, the teaching management departments can also make accurate and correct decisions in turn, and constantly promote the improvement of teaching efficiency and effectiveness.

Principles and Methods Of Curriculum Design based on MOOC Model

In education, especially in online education, the key is to "participate" and "interact" with students, and "guide" and "discuss" with teachers. Only when they interact and encourage each other, can the stickiness be improved, and finally the purpose of attracting students and improving teaching quality be achieved.

Therefore, MOOC model of military vocational education curriculum design should do the following four aspects of work.

Enriching and Perfecting the Design of Teaching Resources

The teaching resources of MOOC course include micro-video of teaching content and instructions of teachers. The smooth degree of teaching is directly related to the above teaching resources. Whether the micro-video of teaching content can express knowledge intuitively, vividly and smoothly is related to whether the students are interested in it or not. Only if they are interested, they will participate in learning.

The micro-video about the teaching content has the characteristics of short, concise and strong sense of rhythm. Being short and concise helps to focus learners' attention. At the same time, to include enough teaching content, so that listeners have enough patience to read, which requires both short time and sufficient knowledge. To meet these two points at the same time, the speed of language must be fast, and faster speed of language is more passionate, and learners are more vulnerable to infection.

As for instructors' instructions, handwritten screens and pens are necessary equipment for recording "micro-lesson" videos. In addition, the teacher's head is also an important teaching resource. It is easier for the students to introduce the situation into the classroom. In the course practice, putting the teacher's head in the lower right corner of PPT can make the students form a one-to-one teaching feeling.

Course teaching design adopts the "micro-course" teaching mode with students as the main body and micro-video as the main presentation carrier of teaching resources. Specific design methods can be divided into three aspects: based on the theoretical knowledge points in the curriculum chapters, traditional teaching videos are divided into several micro-videos, each of which takes about 6 minutes to design; each micro-video is embedded with corresponding knowledge modules for classroom discussion, online test exercises, and can test the results. Provide information feedback; only when students complete the learning of this knowledge module, can they enter the next knowledge module and effectively improve the learning efficiency.

Improve and Strengthen the Interactive Design of Teaching

Interaction must have two sides, unilateral does not constitute interaction. Secondly, the concept of interaction needs to move, and this movement exists in both sides, that is, in the category of "mutual". The most basic form of interaction is the process in which one party sends signals or actions to the other and the other gives corresponding feedback. Complex interaction is a process in which one party initiates and both sides continuously give feedback to the other party's signals and actions, resulting in multiple rounds of information or action exchanges.

Teaching interaction is the key to improve the students' knowledge absorption rate and ensure the teaching effect. There are many ways. According to the characteristics of MOOC, there are three kinds of MOOC courses which are more suitable.

One is case selection. Selection of cases, please use existing knowledge to try to propose solutions, correct errors, set suspense, and then seize the focus, hot spots for in-depth analysis, and finally rise to theoretical knowledge. This method is intuitive, concrete, vivid, interlocking, right and wrong, impressive and active. The disadvantage is that theoretical learning is not systematic and profound enough, the selection of typical cases is difficult, and the capacity of classroom knowledge is small.

The second is multi-dimensional speculative. Provide the existing conclusions and experience methods to solve problems to the students, let them point out the advantages and disadvantages to improve, and can also intentionally set up both positive and negative sides, in order to find the best

answer in the debate. The general method is explanatory principle - Analysis of advantages and disadvantages - development theory. The classroom atmosphere of this method is warm, the problem of analysis is profound and the degree of freedom is large, but it requires teachers to fully grasp the basic knowledge and theoretical level of students, and to have a high analytical grasp of new situations, new problems and new ideas.

The third is the inductive question. In view of the teaching purpose and the difficult and important problems in teaching, this paper sums up the interactive problems before class. At the beginning of teaching, the teachers throw out one by one to the students. The students think and argue extensively. Finally, they can get familiar with what they have learned and broaden their thinking. This method can fully mobilize the enthusiasm and creativity of students, but requires teachers to prepare lessons adequately.

Pay Attention to and Do A Good Job in the Design of Evaluation Feedback

Teaching feedback must be timely. If teachers get feedback information, some wrong perceptions have been deep-rooted in the minds of students. It will take a lot of effort to correct these errors at this time, and the effect may not be good. Therefore, it may achieve twice the result with half the effort to discover the deviations and errors in students' learning in time and adjust teaching to correct and remedy them.

One is Timely Feedback.

Teachers can timely understand the students' knowledge and skills in order to facilitate further teaching. Similarly, if teachers can give timely feedback on the students' homework or answers, they can make the students understand their knowledge deficiencies, so as to facilitate further learning.

Second, Comprehensive Feedback.

Feedback design should cover students at different levels. Different personality characteristics should also be taken into account, introverted students are not active enough in class, lack of self-confidence, but not necessarily have mastered knowledge and skills; extroverted students are lively and outgoing, some personality is too publicized, superficially speaking, the correct rate is often not high.

Teachers should create conditions in MOOC teaching process and obtain more and more effective feedback information through more and better ways. Because it is a long-distance teaching, teachers can not get teaching feedback through classroom observation, but they can get teaching feedback through classroom tests, topic discussions, questions and answers. Through various network communication tools, teachers and students should be encouraged to communicate and discuss in and out of class, to increase the interactive link in the learning process, and to evaluate and feedback the learning effect by means of classroom tests, small assignments and mutual evaluation.

Learning and Utilizing Teaching Data Analysis

MOOC platform has the advantage of big data analysis. With the current cloud computing and data mining technology, we can build the corresponding data model according to the trainees' behavior data in the background. We can use data mining algorithm to analyze and process, and extract the available information.

First, It Helps to Improve Curriculum Construction.

Through the course platform, the students' learning behavior trajectory can be counted and analyzed with massive data, the students' learning progress and needs can be understood, the teaching content can be adjusted reasonably, the teaching methods, teaching resources and teaching decisions can be improved reasonably, and the students can be provided with personalized, diversified and humanized learning environment. To effectively solve the differences in the level of students' learning.

The Second is to Evaluate the Learning Effect Objectively.

According to the analysis of learning behavior, it is agreed that learners who meet certain conditions should apply for the examination within the prescribed time. In order to ensure the objective evaluation of the learning effect of learners, the distance terminal completes learning, homework and examination honestly and independently, and at the same time uses online invigilation technology to judge whether the learner is himself or not.

These data include not only macro-information such as course completion, course evaluation, teacher evaluation, course difficulty, subject nature, school ranking, platform usability and student level, but also detailed information such as the number of forum postings, replies, video viewing, online time, browsing and downloading handouts. Learning behavior data. We can carry on the technical analysis such as linear regression, find out the relationship between the information of the course and the retention rate of the students, so as to regulate and improve the course teaching reasonably, find out the correlation between the students'achievement and the data of learning behavior, so as to predict the learning situation as early as possible and take effective measures to intervene. Improve the effectiveness of students'learning.

Concluding Remarks

Military academies must constantly improve their school-running strength, strive to explore new ways suitable for the characteristics of military vocational education in our army, play a greater role in the development of military vocational education, adopt MOOC as a new educational model, scientifically design MOOC courses, and build abundant educational funds to meet the needs of military vocational education. Source is one of the effective ways for military academies to promote the further development of military vocational education, which must be done well and practically.

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