Novel Teaching Model for High-level College Athletic Students Based on MOOC

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Keywords: High-level college athletic students, Massive open online courses, Teaching model.

Abstract. Because of weak academic foundation, the contradiction between learning and training of high-level college athletic students and so on, it requires that we must adopt new teaching models for them. Based on the analysis of the learning characteristics of the high-level college athletic students and the existing problems in teaching, this paper has put forward the innovative teaching mode based on MOOC from following aspects including the construction of cultivation model, design of curriculum system and reform of teaching method. The teaching practice shows that the novel teaching model has achieved better results.

Analysis of the Learning Characteristics of High-level College Athletic Students

The major of International Economy and Trade (athletic class) in East China University of Science and Technology (named ECUST) aims to cultivate qualified high level college athletic students from academic ability and sports specialization skills. That is, their academic ability can meet the standard of ordinary college students of ECUST. On other hand, the specific sports skills can reach or approach the level of Chinese outstanding professional athletes. At present, this major has been achieved excellent results and formed its own distinctive characteristic.

For high-level college athletic students, there are three main admissions sources:
(1) Type A: the national master-level athletes (the highest level of athletes) and the national first-class athletes.
(2) Type B: national second-class athletes.
(3) Type C: Elite athletes that reach the enroll scores of Chinese ordinary university.

After the entrance of university, the students can be divided into two categories:
(1) Registration and study in school: For these students, they participate in daily training and study in university campus, and their conduct meet the management regulations of ordinary university students of ECUST. These students are consists of two parts:
   1) Case A: Freshman students, sophomore students, and junior students study and train at the Fengxian campus of ECUST, while senior students go back to the Xuhui campus of ECUST. Their learning status is normal.
   2) Case B: Because of the sports competition and training conditions, some students have to study and train at Xuhui campus for four years. Their academic performance is relatively poor or even fail in some courses.
(2) Case C: Registration and not stay in school. These college athletic students are the members of some professional sports team such as national team and provincial team. Perennial training out of university campus is the typical character. Hence, study time is relatively small, and need to make up a lot of extra lessons.
The Problems in Teaching for High-level College Athletic Students

The Contradiction between Learning and Training Is More Prominent
In order to ensure competitive status and athletic performance, college athletic students must ensure long-term, uninterrupted training. This results in a lot of studying time and a lot of professional learning time are occupied by sports training. The systematic and quality of learning cannot be guaranteed [1].

Low Educational Level
Many students began to carry out sports training earlier, and the cultural foundation is weak. Furthermore, some students pay a lot of attention to sports training, despise courses learning, and lack of good learning habits [2].

The Existing Teaching Model Cannot Meet the Requirements
Because of training and competition out of college campus, teaching model based on classroom cannot meet the need of the normal teaching tasks.

Therefore, college athletic students must be cultivated in innovative ways. The MOOC (Massive Open Online Courses) market has exploded. Not only are there a proliferation of courses, there are now a proliferation of MOOC platform providers and tools. Therefore, in the current situation, combined with the learning characteristics of college athlete class, it is of great sense to study and explore the new teaching model based on MOOC.

The New Teaching Model for High-level College Athletic Students

Classified Cultivate According to the Source of Students to Ensure the Integrity of the Culture System
In the premise of ensuring teaching goals, for different types of college athletic students, different teaching models are employed.

Among them, for the college athletic students including Types A and B, teachers deal with the teaching segments based on the schedule of training and competitions, arrange specific learning tasks, and put forward a clear learning requirements in advance. In addition to training and competition, college athletic students implement distance learning with the help of the network, communicate online with teachers, and submit the course work or report through Internet. During no competition, they come to university campus to participate in face to face class study with other students.

For Type C, we strictly carry out teaching plan according to normal standard and requirements of normal university students. But, the time of learning, training and competition as well as network teaching can be flexible arrangements. Independent learning methods and Q & A doubts will be emphasized.

Teaching Based on Different Levels to Ensure the Coherence of the Culture System
For all kinds of college athletic students, teachers combine face-to-face teaching and network teaching to teach, and form three-level teaching model, see Figure 1.
The first level is the basic education stage. This phase is mainly for freshman students and sophomore students, and adopts education mode of required courses account for the main part and elective courses as a supplement. Students complete the majority of required public and major fundamental credits, and a certain number of elective credits. For Case A and B, Students are required to get credits by taking classes. And for Case C students, online teaching is the right choice.

The second level is the consolidation and enhancement stage. It is carried out elective-based for junior students. Under the guidance of teachers, college athletic students develop personalized study plan, and teachers organize students to discuss and exchange knowledge. All students need to submit their course study reports.

The third level is the application and extension stage. College athletic students arrange practical activities according to their own interests and training competitions, and get their practice credits.

In the above three-level teaching, we focus on the development of innovative quality and practicing ability, and increase the proportion of practical courses that suitable for college athletic students. To further improve management system and standardize teaching management, Sports school employs relevant teachers to establish the steering committee of education and instruction, whose members consist of the responsibility professor, associate dean for teaching, the chief of the teaching and research section, the front-line teachers, and enterprise experts, see Figure 2. Its responsibility includes regular guidance of teaching seminars, the development of different teaching staff responsibilities, revision training program and curriculum system for colleges, and the determine of the corresponding teaching content.
Undergraduate Steering Committee of Education and Instruction

Students Working Committee

Associate dean for teaching

Administration Offices of college

Responsibility professor

Supervising Commission of Teaching Experts

Chief of the teaching and research section

Director of the teaching group

Front-line teachers

Figure 2. Teaching management system structure for the High-level College Athletic Students.

The Reform of Curriculum System

Curriculum system reform will be carried out in the following directions: Curriculum system should be placed equally to focus on both theories and knowledge, to promote feedback and interactive teaching design, and to cultivate students' international vision and innovative consciousness. It is necessary that guides teachers to introduce the national model courses, Shanghai model courses, university video open courses, MOOC courses and other open educational resources. With these resources, we will further deepen the reform of class-teaching. The online courses will provide not only audio or video footage, PPT courseware and writing on the blackboard, but also online/offline exercise class, answer quiz, and examination. By these resources, the conflict of learning will be solved to some degree.

In the MOOC environment, face to face class time will be greatly reduced. We must revise the syllabus outline, and adjust teaching content. The way is to retain the corresponding knowledge content of professional core courses, to reduce elective courses, application-oriented theory course hours.

Diversified Innovative Teaching Methods

In the MOOC era, students can independent choose the online courses and the corresponding learning content. Therefore, the teacher must reform the teaching methods and teaching means. It requires teachers change the traditional teacher-centered model, and advocate personalized learning [3]. Students are the core of teaching.

Under the precondition of not interfere with the professional college teaching plan arrangements, teachers recommend some MOOC courseware of core courses to all students. The college athletic students learn and use voluntarily these courseware in their spare time. All courseware users should abide by the intellectual property laws. In practice, teachers and college athletic students should be taught to master the right way to learn online.

Carefully select teaching cases, pay attention to guide students to think and discuss, and strengthen explain of the keystone and difficulty are equally important to teachers. In some courses, teachers are encouraged to use multimedia and virtual reality technology to create an interactive learning environment, increase the fun and influence of the course. At the same time, it stress that teachers should pay more attention to the individual differences of students [4]. To improve students’ participation, initiative and cooperation, teacher will offer an individual tutorship and compulsory exercise after class as per different condition of every student based on the real-time teaching data provided by MOOC.
Construction of Rich Teaching Resources Platform

Teaching Resources System: Professional Curriculum and Sports Training Course

In order to cooperate with the theory and practice teaching, we have constructed a high quality curriculum resource system, which includes textbooks, electronic teaching plan, syllabus, teaching calendar, question databases, and other teaching support materials. On the basis of further standardization of teaching content, we have developed the multimedia courseware, video resource modules and other classroom teaching resources.

Furthermore, through the teaching resources platform the collection of various types of practical cases from teachers and students, the integration and optimization of teaching resources, and the sharing of teaching resources in different campus can be realized.

Course Teaching Website

Aiming to make the self-study convenient, we have constructed a teaching website for college athletic students. The website provides some audio and video recordings, PPT courseware and other materials, such as Online and offline exercises and Q & A, quizzes, midterm exams and graduation exams. It enables students to dig out their potentiality and to develop their individual personality.

Homework Upload System

Using the Homework upload system, teachers can maintain class and students' information, give notice, arrange assignments and practice tasks, and achieve online Q & A. Meanwhile students download courseware, syllabus, teaching calendar, etc., and submit homework, execute online consultation.

The Reform of Appraisal and Evaluation System

By integrating teaching aims with major features, we propose a new appraisal and evaluation system that can give full play to the guidance and incentive mechanism of examination. With the support of MOOC, it will give a more comprehensive and impartial evaluation of students' behavior and schoolwork, such as the online answer questions, interact with other students, class attendance and performance. During the exam, special invigilators or teaching assistants are arranged to be assessed locally [5]. Exam questions and types are as plentiful as possible, and it enhances the difficulty suitably and increases ability test question. In particular, we combine final exams with practice tests, and increase the proportion of usual grades and online assessment.

Application of New Teaching Model

Aim to cultivate high level college athletic students' international vision and enhance their creativity, we have reformed the existing curriculum and teaching method, promoted feedback and interactive teaching design, and introduced some teaching content related to the economic and social development.

Through the reform and practice on new teaching model, it has reached the aim to cultivate the high qualified college athletic students and boosted the major construction. The remarkable achievements of college athletic students in the table tennis, tennis, athletics, basketball, martial arts, shooting and other sports projects are admirable. In 2012-2016, the college athletic students of ECUST have won 19 championships, 3 runners-up and 3 third place in the international sports competitions, 26 championships, 11 runners-up, and 6 third place in Chinese sports events, 25 championships, 23 runners-up, and 8 third place in city sports events.,

At the same time, college athletic students of ECUST academic record and athletic achievements go hand in hand. The pass rates of CET-4 and CET-6 of 2013-2016 graduates are 53%, 59%, 67%, 68% and 21%, 21%, 22%, 20%, respectively, which is higher than many universities in China. The
percentage of 2013-2016 graduates studying abroad is 24%, 38%, 41% and 38%. The employment rate of 2013-2016 graduates have reached 96.55%, 100%, 100% and 100%. More than ten college athletic students of ECUST have participated in the national, Shanghai and university-level College innovation and entrepreneurship program and achieved excellent results, which won one national silver award and one bronze award, and one Shanghai golden award and one silver award.

Summary

With high speed development of Internet, huge impact is brought on the education reform by MOOC for the cultivation of high-level college athletic students. Based on MOOC, this paper puts forward a new teaching model for college athletic students and applies it to practice. Practice results showed that the new model not only effectively promoted the students' academic abilities but also excited the students' study interest and enhances cultivating students' sports skills. And, it has a strong demonstrative and spreading effects.

Acknowledgement

This research was financially supported by the Shanghai Sports Social Science Decision-making Consulting Project.

References


