

On the talent training and curriculum design of e-sports and management major in higher vocational colleges

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Abstract: With the popularity of E-sports activities, the rapid development of the industry, and the increasing market scale, the problems of the expanding demand gap of E-sports talents and the insufficient training of E-sports talents have become increasingly prominent. Based on the analysis of the current situation of e-sports industry and talent demand, this paper puts forward the cultivation of interdisciplinary and integrated talents such as education and sports, operation and management, technical analysis and production, and strengthens the multi-party cooperation between government, industry, school and enterprise, the construction of teachers and campus documents, so as to jointly build a talent training system and curriculum, and cultivate comprehensive skilled talents serving the e-sports industry.

1. Introduction

In recent years, more and more e-sports events have entered the public's field of vision. The e-sports industry is booming, the industrial economic benefits are obvious, the industrial scale is expanding, and the output value is also increasing year by year^[1]. However, there is a huge contradiction between the spurt development of the e-sports industry and the demand for e-sports talents. Because the e-sports and management major has been set up for a short time, and has not yet formed a perfect professional construction system, talent training scheme and school experience, this paper analyzes the talent demand of the current e-sports industry and combines the current teaching implementation of this major, and discusses the talent training direction and curriculum setting of the e-sports and management major, hoping to provide reference for the establishment of e-sports major and talent training in related brother universities.

2. E-sports industry and talent demand status

According to the data of the 2020 e-sports market report by NEWZOO, the global e-sports market revenue exceeds 1 billion US dollars, and there are about 2 billion people in the world, of which China has a huge share. With the attention and development of e-sports industry in various places, various e-sports industrial parks, e-sports characteristic towns, e-sports tourism and other projects have been put into construction, and the market prospect is very broad^[2].



Figure 1: Market size of China's e-sports industry from 2016 to 2020

(Source: Ai Media Data Center)

The rapid development of e-sports market economy has caused a huge talent gap. According to the data of Market size of China's e-sports industry from 2016 to 2020 by Ai Media Data Center(Figure 1), the talent demand gap in China's e-sports industry is as high as 85%; E-sports market has great demand for professionals such as statistics and analysis of e-sports data, competition operation and management, host and anchor, and game development engineers. In 2017, the major of e-sports sports and management will be officially enrolled, and the first batch of graduates will appear in 2020. According to relevant statistics, the total number of graduates trained by the major of e-sports sports and management in China in 2020 will not exceed 10,000, which is far from meeting the market demand^[3]. In 2019, the Ministry of Human Resources and Social Security officially released the "Analysis Report on the Employment Prosperity of E-sports Players", which analyzed various posts in the e-sports industry and predicted the development trend of the industry, and predicted that the demand for talents in the e-sports industry would reach 2 million in the next five years.

At present, the e-sports industry is in a state of rapid development and increasing market modules year by year. There is a large demand for talents related to e-sports, but the training of talents can not meet the market demand. It has become one of the urgent problems to be solved in the development of e-sports industry.

3. Analysis of the current situation of e-sports and management major

In September 2016, after the new major of "E-sports Sports and Management" was officially announced, many colleges and universities successively opened e-sports related majors; According to the data of the website of the Ministry of Education(Figure 2), in 2017, there were 19 higher vocational colleges in the country offering e-sports sports and management majors, 51 in 2018, 95 in 2019 and 139 in 2020; It does not include e-sports majors offered by Communication University of China Nanguang College, Shandong Institute of Physical Education and other undergraduate colleges^[4].

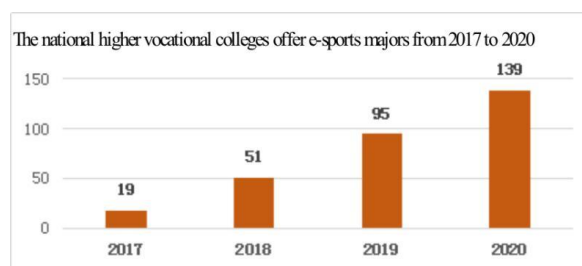


Figure 2: The national higher vocational colleges offer e-sports majors from 2017 to 2020

Xilingol Vocational College is the first college in China to offer e-sports major^[5]. The core courses shown on the official website of the school are the history of e-sports, e-sports textbooks, data analysis and analysis, MOBA real-time strategy professional courses, card games professional courses, referees, coaches and team leaders and related behind-the-scenes personnel professional courses. The professional courses of Sichuan Film and Television University include audio-visual language, animation foundation, game creation and management, script writing, stop-motion animation, digital music creation and sound editing, game role and scene design, game level design, etc.

According to the situation of major universities offering e-sports and management majors in China, the professional curriculum and personnel training are not the same. For this major, some colleges set up e-sports colleges, while others are affiliated with other colleges according to the existing characteristic disciplines of the school. There is no uniform standard, and there are some factors such as weak teachers and poor training conditions. At present, with the rapid development of e-sports industry, there is a huge talent gap. It is urgent to accurately meet the development of the industry, formulate a reasonable, scientific and perfect talent training system and objectives according to the actual situation, strengthen the training of students' comprehensive ability and innovative ability, and cultivate high-quality and high-level e-sports practitioners.

4. The training direction of e-sports and management professionals

E-sports refers to the use of electronic equipment as sports equipment to compete with each other in mental and physical strength, which can train participants' thinking, coordination, reaction and other abilities(Figure 3). Therefore, e-sports is not a game in the traditional sense, and e-sports majors are not specialized in training students to play games; Students majoring in e-sports and management should be able to work in related industries in the whole e-sports ecosystem after graduation. Through the investigation of social market demand and nearly one year's professional teaching, and actively exploring professional development, this paper puts forward that the major of e-sports and management should be oriented to the training of interdisciplinary talents such as education and sports, operation and management, technical analysis and production, and can be engaged in the operation and management of sports events such as e-sports, statistics and analysis of e-sports data, e-sports video production and broadcasting technology, event host and anchor, etc^[6].

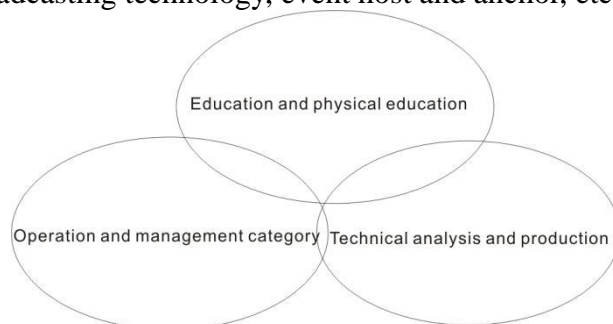


Figure 3: Cross-integration of compound talents in e-sports majors

4.1 Education and Sports

The major of e-sports and management originally belongs to the major category of education and sports. It is not simply to train e-sports athletes, but also to train e-sports referees, e-sports nutritionists, and e-sports hosts and anchors. E-sports competition focuses on professional players, but it still needs supporting full-time staff. E-sports elements combined with current traditional occupations can lead to a series of new jobs. For example, e-sports players need long-term training and often need to keep a single posture unchanged for a long time, which will cause some physical and psychological injuries,

so professional e-sports nutritionists and trainers are needed to help them adjust their state.

The cultivation of this kind of talents can be developed in the direction of education and sports. With reference to the traditional sports majors, in addition to offering e-sports knowledge courses, it is necessary to add related courses such as kinematics, nutrition and psychology.

4.2 Operation and Management

E-sports requires full-time personnel to be responsible for event planning, publicity and organization, as well as the operation and management of related venues and teams. E-sports and management majors can be combined with existing management disciplines to train e-sports related talents such as team leader broker, planning and execution, and e-sports business. For example, a large-scale e-sports competition needs a team to plan and organize in order to ensure its smooth development. Team members need to deal with various problems before and after the competition, such as time, venue and funds, so a special e-sports operation management team is needed to conduct professional public relations.

The training of this kind of talents can develop in the direction of operation and management, referring to traditional management majors, besides offering e-sports knowledge courses, appropriate courses such as strategic management, communication and management, organizational behavior and so on are added.

5. The current problems of e-sports and management major

Looking at the e-sports majors offered by local colleges and universities, the main problems currently exist are as follows:

1) The teaching materials are of low quality and easily outdated. E-sports major has only just started for two years, and many contents are in the exploratory stage, including e-sports itself, which has a short history. In addition, e-sports itself has the characteristics of rapid changes, so it is difficult for the teaching materials of e-sports major to keep up with the version of e-sports competition and the rhythm of players' changes, and the prepared teaching materials may be outdated in just one year.

2) E-sports majors in colleges and universities lack teachers. It is the key that colleges and universities want to set up e-sports professional teachers. E-sports has only been developed for ten or twenty years. Even if most retired professional players and workers with relevant e-sports experience are brought together, they cannot meet the needs of students. E-sports has not accumulated enough talents to join the rear education.

3) Lack of teaching standards caused by lack of industry standards. "The e-sports industry has developed to a huge scale in just a few years, lacking systematic experience summary, and the job responsibilities and related personnel training standards for the e-sports industry are not clear." Many posts in e-sports clubs are "multi-functional", and there is no clear division of responsibilities.

6. Suggestions on the development of e-sports and management major

According to the current problems of e-sports and management major, some suggestions are put forward as follows:

1) Strengthen school-enterprise cooperation, and develop a talent training system jointly by schools and enterprises

E-sports and management major has been set up for a short time, and has not yet formed a perfect talent training system. It is necessary to jointly develop an e-sports talent training system with industries, schools, enterprises and the government. Starting from the market demand, we should set up scientific and effective courses and formulate standardized teaching standards. Talent training

system is the outline of implementing talent training. Taking the actual needs of enterprises as the goal, planning students' learning paths, from simple to complex, from theory to practice, and from classroom to company, can enable students to achieve the goal of employment, thus cultivating e-sports talents suitable for enterprises.

2) Accelerate the construction of teaching staff, and build a training base between schools and enterprises

The shortage of e-sports talents, weak teachers and poor training conditions are common problems in most colleges and universities. At present, most teachers are retired players or coaches from e-sports competitions, which leads to the problem that their own professional ability is extremely strong, but their teaching level is low. Therefore, it is urgent to speed up the construction of teachers, train their own e-sports teachers, strengthen the examination of teachers' qualifications and ensure the quality of classroom teaching. At the same time, the training base is an important platform for students to improve their professional skills on campus, and most colleges and universities are backward in training conditions due to the limitation of funds, personnel and venues. Therefore, enterprises can jointly build training venues, colleges and universities can set up e-sports majors at lower cost and recruit students quickly, and enterprises can also provide talents training mode and curriculum design services for colleges and universities to solve the problem of insufficient venues.

7. Conclusion

In recent years, the e-sports industry has developed vigorously, and there is a great demand for talents. However, due to the short establishment time of e-sports and management specialty, the immature training of talents and the shortage of teaching teachers, there is a huge talent gap. Colleges and universities need to identify the positioning of e-sports and management majors and make clear the training of talents. E-sports majors do not only train e-sports talents who play games, but also train comprehensive talents who are integrated with education and sports, operation and management, technical analysis and production.

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