

Analysis on the Reform of Basketball Course Based on Educational Information Technology

Xinjian Wang, Min Zheng

Xi'an Physical Education University, Xi'an, 710068, China

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Abstract: The rapid development of modern information technology has brought about profound changes in educational thoughts, goals, content, methods, environment, and evaluation. As a compulsory course for sports training majors basketball specialized course has to face the new era of the information technology integration. And the pointcut of information technology integrating application gradually become the key to teaching reform of the course. This paper analyzes the fusion of basketball teaching tasks and modern educational information technology achievements, and makes a directional exploration of the problem, providing a basis for the further implementation of basketball specialized courses reform and information technology integration development.

1. Introduction

Teaching refers to the activity carried out by the instructors to direct those who are instructed. In other words, it refers to the activity that combines teaching and learning [1]. Teaching is a common activity of teaching and learning between teachers and students on the basis of curriculum content [2]. With the gradual popularization of computers and networks in the whole society, computers and networks have become the basic production tools of the information society, and are profoundly changing the basic situation of the world. The rapid development of modern information technology is bound to bring new vitality to the field of education, initiating profound changes in educational ideas, objectives, contents, methods, environment and evaluation.

Basketball specialized course is for basketball majors enrolled by a single text. Before entering school, students have a certain professional and technical foundation, yet they differ in interests. Under the "unified" teaching plan and training objectives, teachers can only rely on the implementation of the curriculum to differentiate tasks within the framework of differentiated treatment of teaching. Therefore, the curriculum design and on-demand teaching are gradually becoming the urgent problems to be solved in the teaching reform of basketball specialized courses.

Instructed by the training objectives of sports training specialty, this study aims to explore what positive effects the development of educational information technology can have on the teaching reform of basketball specialized course, so as to provide its theoretical and practical basis, and also to expand the direction of teaching reform of basketball specialized course promoted by the educational information technology.

2. Achievements Deriving from Educational Information Technology

Information technology has won the support of teachers and students for its convenience, efficiency and interaction. Modern information technology has provided a broader resource platform for educational equity. For some time, the products of modern science and technology, such as distance learning, multimedia-assisted teaching, and virtual University have been widely integrated into the learning of teachers and students. So, what are the achievements as a result of educational information technology nowadays.

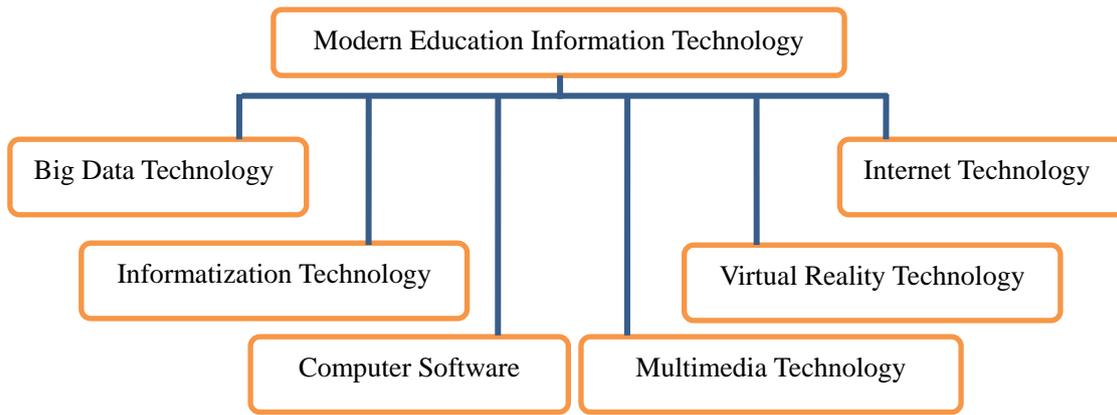


Fig 1 Framework of Modern Educational Information Technology

3. Contents of Basketball Specialized Course

Basketball specialized course for sports training majors is a professional course which covers basketball skills and tactics theory and sports practice as well as competition organization, competition rules and refereeing methods as its main teaching contents. The course is taught in the training team mode of which is systematically divided into four semesters according to the teaching plan. The details are shown in Figure 2:

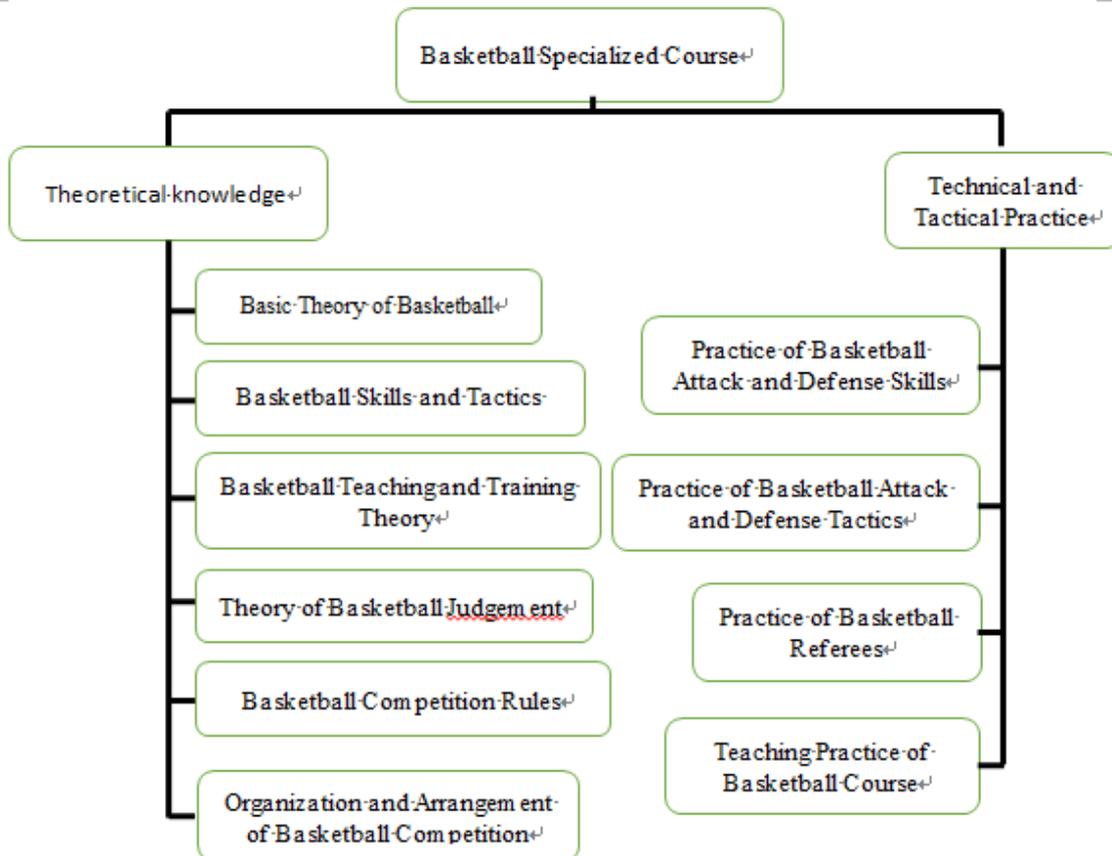


Fig 2 Framework of Basketball Specialized Course for Sports Training

4. Integrative Educational Information Technology in Basketball Specialized Course Reform

4.1 Informationization in Society

The high degree of informationization in society makes the teaching of college basketball specialized courses face new changes in social environment. Today's society is a highly

information-based society. As information dissemination channels become more diversified, communication and transmission become faster and more convenient, and thus the ways and capabilities of people to acquire and process information have also changed greatly. This poses new opportunities and challenges for the reform of school education and teaching.

The impact of information technology on the social environment of basketball training courses for sports training is mainly reflected in the following two aspects. First, information technology has gradually become the most basic knowledge and skill that students are supposed to have in participating in social activities. The knowledge needs of information technology related to basketball specialized courses will gradually increase, making adaptive changes in curriculum settings and teaching content. . This change in internal demand will accelerate the transformation of traditional basketball specialized courses to adapt to social development. Second, the cross-regional industry transformation and industry restructuring caused by modern information technology will directly get involved in the differentiation and reorganization of college basketball specialized courses through educating and training market competition. Information technology lies in the teaching of college basketball specialized course, the application of which will promote changes in the way teaching is conducted.

4.2 The Challenge to the Teaching from Knowledge Update and Development

The rapid update and development of human knowledge systems pose a serious challenge to the teaching of specialized courses. From the trend of education reform in various countries in the world, we find that education is shifting from simply imparting skills and knowledge to cultivating the ability of knowledge innovation. That is to teach students the basic skills and knowledge as the medium and content, while to cultivate students' innovative spirit and independent learning ability as the core. This kind of training focus is different in that for students, the most important thing is not to learn the skills and knowledge about basketball, but to cultivate students' ability to self-renew knowledge structure.

4.3 Computer Software as the Shoulder of the "Giant"

Excellent computer software has emerged to provide advanced production tools for basketball teaching and scientific research. With the development of computer software and hardware technology, many excellent softwares play a huge role in all areas of social activities, and vigorously promote the development of the world. College basketball specialized courses should seize the opportunities brought about by modernization in a timely manner, and apply a large number of excellent softwares to offer advanced production tools for basketball teachers so that they could better engage in basketball teaching and scientific research. Today, whoever take the lead in combining their teaching, research and computer information technology, whoever will stand on the shoulder of the "giant". From the perspective of specific teaching reforms, a large number of excellent softwares have brought large-capacity information resources, convenient methods and unprecedented bilateral experiences of teaching and timely interaction for basketball specialized teaching. It can be summarized that computer software has profoundly affected the daily working methods, from the aspects of teaching content selection, teaching method implementation, technical and tactical design and performance, teaching feedback interaction activities, technical and tactical experience and guidance, and effects resource sharing methods.

4.4 Multimedia technology in the field of Teaching

The wide application of multimedia technology in the field of teaching provides broad space and unlimited opportunities for the reform of basketball specialized courses. Multimedia technology, as the carrier of teaching content, can purposefully combine text, graphics, images, video information, animation, sound and other information. With the further development of modern information technology in large-scale integrated circuits, optical discs, images, sound information compression , touch screen and speech recognition, multimedia computer is bringing about a profound revolution to the school education. The effects of multimedia computer on basketball specialized course is not only on the combination of picture, text, sound and picture in technology, but also the integration of

different disciplines (natural science and social science). In a broader sense, it combines many different sectors of society, such as communication, film, television, publishing, printing, entertainment and basketball teaching, thus creating the infinite creative space and development opportunities to both teachers and students.

4.5 Virtual Reality Technology

Provides the possibility to simulate surreal basketball teaching scene."Virtual reality" refers to the multidimensional information exchange system design by the computer hardware and various sensors. When the participants are in the virtual reality scene, it is like entering the "real" illusion, producing the feeling of being in the scene, which can simulate and experience the real-world scene, interact with people and things in the environment, and exchange information. In the latest basketball games developed at home and abroad, students can play their favorite basketball superstars at will, or compete with their favorite stars in the same field. thus, they display their skills in the virtual game world, while completing the thinking, technical and tactical activities. It is believed that in the near future, we can make use of this technology to PK with our idol in three-point shooting game, or even one-to-one battle in the virtual scene.

4.6 Time and Space Changed by Internet

Time and space changes in teaching activities in the Internet era have changed the traditional teaching elements. Under the traditional teaching mode, regardless of the teacher's "preaching, teaching, and confusing" pattern, or the students' hard work efforts, all the activities are based on the real-time elements of school, family, classroom, library, laboratory, basketball hall, etc. However, the rapid development of internet technology by means of surfing to get access to information and knowledge, and to connect people with different needs, has altered completely people's long-term living environment, learning time and space. In the information technology era, as the internet has changed two basic elements of teaching space and time, the teaching activities have also undergone fundamental changes. We must take the initiative to use advanced technology to innovate and transform our traditional teaching methods.

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