The Importance of Informatization in Medical Education

Jin-guo Wang and Na Wang

ABSTRACT

Along with informatization, medical education faces with new challenges and opportunities. Education informatization in our country is now into a period of rapid development and gets achievement. Modern distance education network, computer platform of medical education research and education satellite network are established. Satellite broadband multimedia transmission platform has been initially formed. They are interactive based on modern distance interactive education network platform. The new concept of modern informationization and digital network has gradually replaced the traditional medical teaching practice, which is also the big trend of education development and informationization teaching in China.

1 INTRODUCTION

In this century, network communication and multimedia technology which is the core of the rapid development of information technology raise big changes in many fields and accelerate the pace of human into the information society [1]. With the opportunities offered by the informatization, our government has made it clear that it should take the opportunity to promote industrialization and realize the leap-forward development.

In this context, Chinese medical education is proposed to meet the new challenge of information. How to make full use of new technology and build a new medical education mode is a daunting task in front of us [2].

Some colleges and universities also start with online studying. The projects of automation, digital library, remote teaching, teaching resources and the network course are applied. Network transmission system has to connect to the campus library, teaching building, administration building and lab building training floor. Multimedia has strong interactivity, good visibility, wide content and interest [3].

Jin-guo Wang and Corresponding author: Na Wang*, The First Hospital of Jilin University, 71 Xinmin Street, Zhaoyang District, Changchun, Jilin 130021, China
The characteristics of various universities increase teaching network interactive platform, multi-function. The construction of informationization means including multimedia classrooms and language lab enhances marks the modern education teaching. Vocational colleges have begun to develop.

2. INFORMATIZATION EVALUATION

2.1 International informatization evaluation

On the base of informatization evaluation in China and abroad, college education informatization gap between our country and the developed country is compared. Lessons are draw from foreign achievements in the development of medical education informationization, using the multidisciplinary theories, research methods and practice of college education informatization, combined with the characteristics of college education informatization in China [4]. The study of medical education informatization index system proposed USES, by analyzing and comparing various commonly used comprehensive evaluation methods. The factor analysis method is put forward a set of university informatization evaluation index system to form a complete set of measure and evaluation methods for different quantitative information level education in colleges and universities [5]. The model is operated in order to develop college education informatization and decision-making by providing the reference.

The innovation and development of university student affairs under the background of research informatization is an important topic at the present stage of education. Under the background of rapid development of informationization, student affairs administration of colleges and universities in our country is facing unprecedented opportunities and challenges [6]. The informationization can promote the construction of digital campus, innovation of college personnel training mode and innovation of management work at colleges and universities. Information communication is not timely, easy to form the information isolated island, decreases difficulties of campus safety management [7]. At present, the college student affairs administration is not adapted to the development requirements of the informatization. The full implementation of college student affairs management will be a long time.

2.2 Domestic informatization evaluation

Education informatization is the huge change of human society since text production. It is the only way to realize the modernization of education and to let the medical education to meet the challenges of knowledge economy. At present, Chinese medical education is undergoing a profound change [8]. On the one hand, because of the rapid development of modern information society for talents training mode, talent quality requirements, such as higher update requirements, higher schools need to cultivate more talents to satisfy the needs of the modern society [9].

On the other hand, the advanced medical education itself needs to survive on the basis of change, to innovate and develop, break the shackle of traditional education mode and go to education modernization. Both sides need to use education information as support. Therefore, education informationization is a necessary way for the further development of Chinese medical universities [10].
An important symbol of comprehensive strength of a country is the country's information level and the information ability. Accordingly, the informatization construction level of learning environment will also affect the school's core competitiveness.

The overall informatization learning environment construction level of all colleges and universities will have a certain effect on the information level of the whole country, thus affecting the comprehensive strength of the country. At the same time, for colleges and universities to undertake the task of cultivating talents, in recent years, informatization of education process receives increasing attention from the party and the country, information-based learning environment can also became a top priority [8].

By designing colleges and universities information learning environment, the modern classroom teaching process is guided to promote the development of teachers and students. The improvement of information literacy speeds up the progress of the society, in order to improve the current education reality [11].

3. MEDICAL EDUCATION INFORMATIONIZATION

3.1 Changes of medical education

Education informationization is far-reaching and fundamental to the impact and change of education. In some sense, we can call it education revolution. It has brought profound changes to education thought, education concept, education mode, teaching content and teaching methods and education evaluation system. When humans enter the information society, the update cycle of knowledge is greatly shortened, and only the ability to master knowledge can be based on modern society [12].

At the same time, education informationization promotes advanced medical education gradually, including the construction of digital campus, the teaching content and digital multimedia. It greatly expands the time and space of education and the education object. It makes it possible of mass education and lifelong education [13].

The application of modern information technology and the introduction of new education ideas will make the teaching organization more flexible, the teaching plan more flexible and the teaching more pertinent. With the continuous deepening of education informationization, the university will also have a deep understanding of the importance of information construction to promote education.

3.2 Unified standard

The essence of college informationization is that IT supports the development of teaching, scientific research and management. Therefore, it must fully understand the development trend of IT technology, using advanced and mature to make an overall plan on university informatization. The sustainable development of the technology should be implemented, which ensures that in the process of planning the implementation of it won't change the development of IT technology and technical route [11]. At present, it is not only lack of a complete set of management informationization standard at the macro level, but also the lack of a proper information standard at the micro level, inside the colleges and universities. It makes it difficult to communicate among department systems.
Only in the Jilin University, for example, the student's professional codes have a few sets of versions, student affairs office, college office and admissions departments according to their respective work. For professional code, as the information standards of this system, the communication between these systems set up a natural barrier.

In our country, at present the standard construction is still in lag. In contrast, it does very well in teaching information technology standard in the United States, Europe and Japan. They have the very seriously standards and they set out to set standards early.

College students' affairs administration in our country is gradually implementing informatization. It has made significant progress, but in the current information of the new situation and new problems, students' affairs administration of colleges and universities can't fully meet the development requirements of the informatization [14]. It is necessary to strengthen the construction of campus network and make the Internet carry forward the main melody, making it an important means to carry out the education.

4. SUMMARY

Both foreign developed countries and China, education informationization has gradually penetrated into our education idea and the concrete implementation, in the process of national education informatization. China can learn the advanced information concept and draw lessons from foreign developed countries and promote implementation experience.

China compared with the developed countries abroad, in the aspect of teaching informationization means there is a certain similarity, but in infrastructure equipment, technical means and popularity the application of gap is larger.

College informatization is becoming a trend. The informationization of university student affairs is an important aspect. Under the background of informationization, the student affairs management of colleges and universities in China is faced with unprecedented opportunities and challenges. It will take a long time to fully realize the innovation of university student affairs management.

At present, the development of university student affairs management under the background of research informationization is an important research topic at the present stage of Chinese medical education.

REFERENCES


6. Nikiforidis G, Kagadis G, Orton C. It is important that medical physicists be involved in the development and implementation of integrated hospital information systems. Medical Physics. 2006


12. Jahidul Hasan. Integrated Hospital Information System (HIS) Special focus on BIRDEM Hospital (600 Beds)[J]. E-Health Telecommunication Systems and Networks. 2013 (02)