

## The role of educational informatization in the modernization development of the Higher education

### Abstract

Objective: This review is to explore the role of education information technology in the construction and management of modern Institutions of higher learning and modern high education , and how to use information technology to promote the development and management of Institutions of higher learning and Higher education. Methods: The relevant education information and data at home and abroad were collected from the Internet, and the Institutions of higher learning and Higher education and management of the modern Institutions of higher learning were compared and analyzed to compare the role of education information of the Institutions of higher learning and Higher education.

Results: After the effective implementation of education information in the Institutions of higher learning, the technical level and efficiency of the Institutions of higher learning management technology in the modern

Institutions of higher learning were obviously improved, so that students could communication with teacher more conveniently, and teacher and staff could have a higher level of communication of education . Conclusions: The use of education information can significantly improve the overall management level of the Institutions of higher learning and Higher education.

improve the construction and management of modern the Institutions of higher learning which is of great significance to the improvement of the level of education and management technology in the Institutions of higher learning and Higher education .

Educational information is the way to promote the development of colleges and universities, and also an important way to modernization.

The comprehensive use of modern information technology based on network communication and computer multimedia is conducive to the cultivation of students' innovative spirit and practical ability. Under the network environment, the teaching content, teaching means and teaching forms can be improved and innovated, which can serve for the high quality completion of teaching tasks, the optimization of teaching process and the rapid achievement of teaching objectives, so as to continuously improve the school-running efficiency and adapt to the new needs and requirements of the information society for the development of education.

KEY WORDS :Educational , Informatization ,Modernization  
Development , Institutions Of Higher Learning

## Introduction

The -Informationization of education first appeared in some academic documents in Japan in the 1960s. The concept of educational informatization was put forward with the construction of information superhighway in the 1990s. In September 1993, the Clinton administration of the United States formally proposed the plan to build "National Information Infrastructure" (NII), commonly known as Information Superhighway. Thus driving the wave of global information construction.[1-3]. Educational informatization refers to the comprehensive application of modern information technology based on computer multimedia and network communication in the course of education to promote the overall reform of education and make it adapt to the requirements of information society and education development. Cultivate students' innovative spirit and practical ability. Under the network environment, teaching content, teaching means and teaching forms can be improved and innovated, which can serve for the high quality completion of teaching tasks, the optimization of teaching process and the rapid achievement of teaching objectives, so as to continuously improve the quality and efficiency of education and adapt to the new requirements of the information society for the development of education.[4-5].

It is the basis, premise and condition of realizing the modernization of education.

The internationalization of education means that education should be oriented to the world and integrate, exchange and cooperate with various countries.

China since the late 1990s, with the rapid popularization of science and technology and network technology, the development of the society as a whole, the improvement of people's living standard and demand and the relationship of information technology is more and more close, people more and more attention to information technology on social development and people's living standard, especially the development of education modernization, the influence of the social informatization, And education reform and development, began to appear "education informatization".

Informationization, digitalization and intelligentization have become one of the most obvious themes and characteristics of the 21st century era. Not only has a great impact on social culture and People's Daily life, but also no matter from the country, society, industry or specific institutions, informatization is an important factor of development that cannot be ignored. College informatization is the "foundation and forerunner" of the development of education informatization. It has experienced from the infrastructure construction at the initial stage to the construction of digital campus with business system as the core, and now it has developed to the construction stage of smart campus characterized by deep integration and innovation-driven.

In recent years, higher education informatization has made significant breakthroughs in many directions, such as online, online and offline hybrid teaching, smart classroom construction, knowledge community and scientific research services, data/business center construction, campus affairs "One network access office", ushering in another period of rapid development.

### **Methods:**

The relevant education information and data at home and abroad were collected from the Internet, and the national situation of the Institutions of higher learning and Higher education . the data and information of the teachers and students of universty and high education and management were compared and analyzed to compare the role of education information in the Institutions of higher learning and Higher education . [6-7-18].

Educational informatization refers to the comprehensive application of modern information technology based on computer multimedia and network communication in the course of education to promote the overall reform of education and make it adapt to the requirements of information society and education development. It is the basis, premise and condition of realizing the modernization of education.

Under the guidance of advanced educational ideology, it is a systematic engineering to actively apply information technology, carry out in-depth development, make extensive use of information resources, train innovative talents to meet the requirements of the information society, and accelerate the

realization of educational modernization in all aspects of the field of education and teaching. Educational informatization refers to the process of comprehensively and deeply applying modern information technology in the field of education to promote the reform and development of education. The result is bound to be the formation of a new form of education, information education informatization. Education informatization refers to the process of making full and in-depth use of modern information technology in all fields of education system to accelerate the realization of education modernization under the unified planning and organization of the state and education departments[16-17].

Educational information is a real and concrete description of the operation process of teaching management activities. Educational information reflects the development and changes of educational activities in a timely manner, and provides scientific decision-making basis for leaders of educational activities at all levels through the collection, sorting and feedback of various information and data of educational activities. The general requirements of educational information are that the key points should be prominent, the materials should be detailed, the transmission should be rapid, and the text should be concise.

Educational informatization includes campus network, that is, the local network in which the information devices in the campus interconnect and run. It is a scientific management and educational service composed of computer, network, technology, equipment and software[16-19].

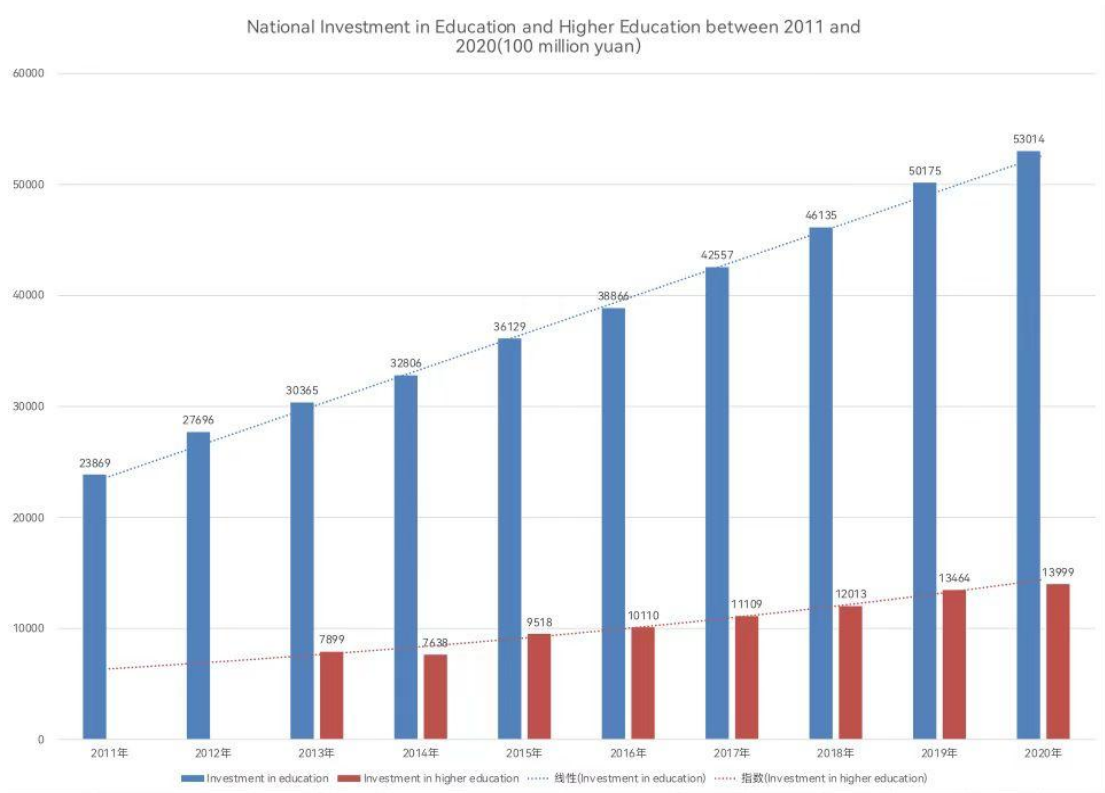
The integrated application system of education and teaching service can realize distance information exchange and resource sharing through WAN interconnection.

Modern information technology: Using modern tools to effectively process, store, retrieve, download, etc.[14-19].

## Result

1) After the effective implementation of education information in the Institutions of higher learning and Higher education . the technical level and efficiency of education and management technology in the Institutions of higher learning and Higher education were obviously improved, so that student could communication more conveniently, and teachers and student could have a higher level of communication .After the application and management of education information and data have made the education technical ability and management level of the Institutions of higher learning and Higher education play a very important role, which has changed a lot, making it easier for communication Between the student and teachers as Significantly improve the teaching level and quality of education in the Institutions of higher learning and Higher education . [4-10].

Fig 1: National Investment in Education and High Education  
between2011-2020



## 2) Improvement of education Services

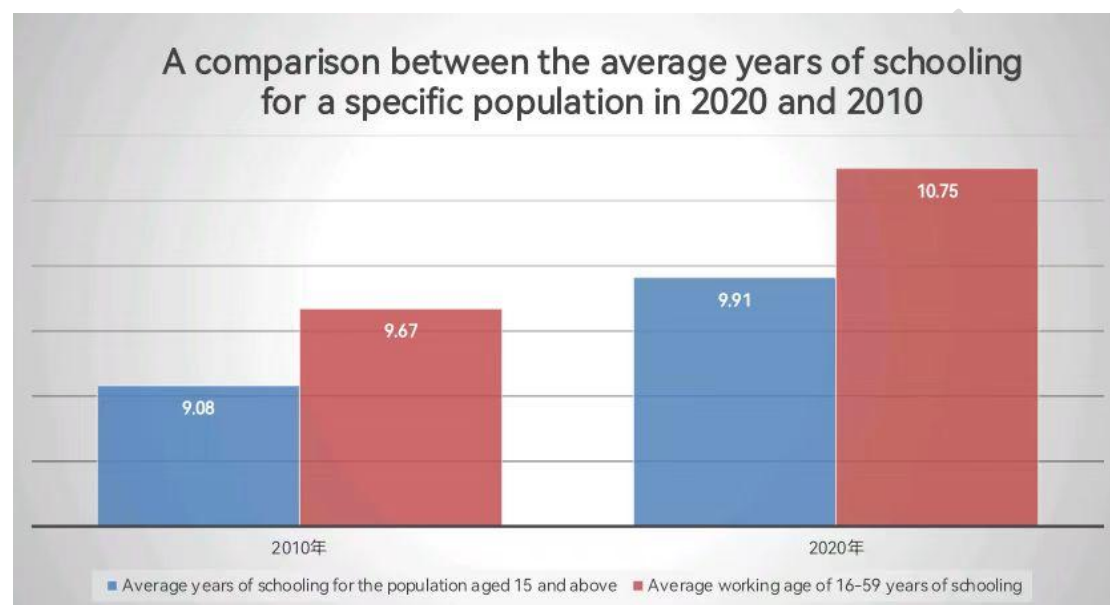
Continuous improvement of education services to build a "highway" of the Institutions of higher learning and Higher education .

After the application of educational information, the teaching level and education quality, administration and logistics management of colleges and universities have been significantly changed.

Through promoting education information construction, promoting appointment technical ability of education strengthening education services, optimizing service process of the Institutions of higher learning and Higher education .

standardizing education deepening the connotation of high-quality education , and paying attention to modern education , efforts have been made to improve education services and teaching quality.[6-13].

Fig 2: A comparison between the average years of schooling for specific population in in



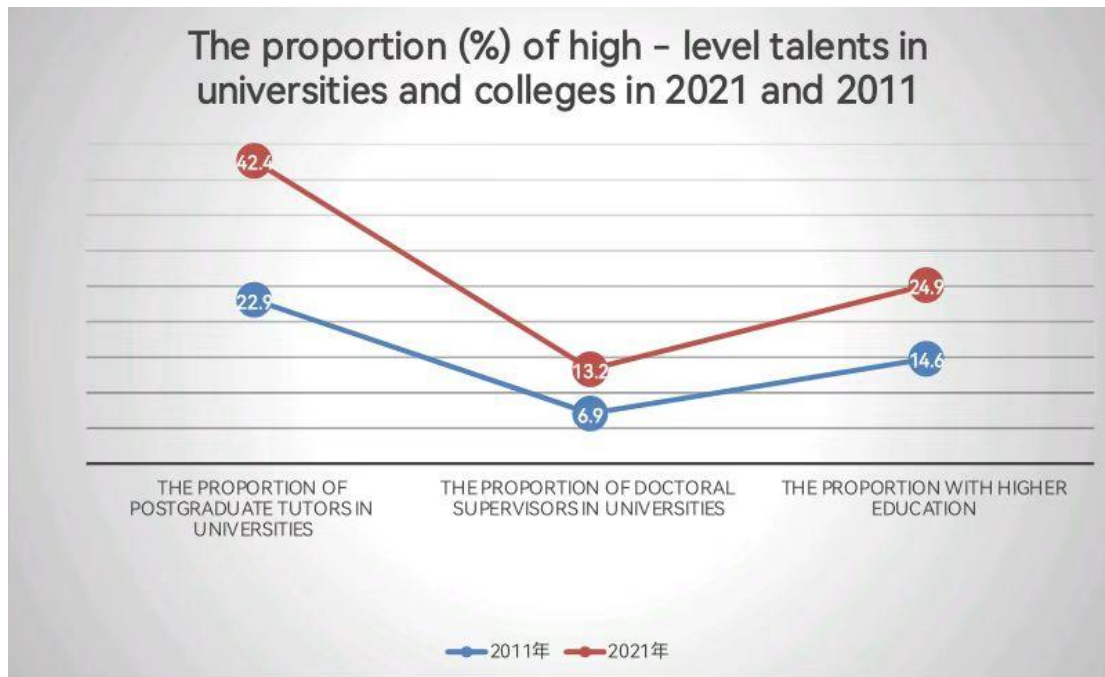
Through promoting education information ,the comprehensive use of modern information technology based on network communication and computer multimedia promoting the cultivation of students' innovative spirit and practical ability. Under the network environment, the teaching content, teaching means and teaching forms can be improved and innovated, which can serve for the high quality completion of teaching tasks, the optimization of teaching process and the rapid achievement of teaching objectives, so as to continuously improve the school-running efficiency and adapt to the new requirements of the information society for the development of education.

As an endogenous variable of systematic reform of education, educational informatization plays an important role in supporting and leading the development of educational modernization, especially in the era of rapid development of information technology.

The connection between education informatization and the overall development of economic and social informatization will be closer, the interaction will be more frequent, the boundary will gradually fade, and the open development ecology of education informatization will accelerate the formation.

the Institutions of higher learning and Higher education based on big data, artificial intelligence, blockchain and other new technologies will effectively support the personalization and precision of learning, and promote the transformation of learning evaluation methods based on intelligent analysis of process data; Education and teaching model will undergo revolutionary changes, online and offline mixed teaching gradually become the mainstream; The great utilization and the Institutions of higher learning and Higher education resources will be further strengthened. Intelligent education will play a more important role in bridging the gap between urban and rural education and promoting the balanced development of urban and rural education in China [2-13]..

Fig 3: The proportion of high education in 2021-2011



Education informationization is the basic connotation and the prominent feature of education modernization. By supporting education informationization, leading education modernization is the strategic choice of our country education reform and development in the new era. Nowadays, the application of big data, artificial intelligence, 5G, Internet of Things and other technologies in the field of education has gradually become the "new normal". The construction of university information ecological environment presents more development concepts of "new infrastructure", and integration and innovation have become an important trend of the connotation development of education information. Especially in the special situation of the novel coronavirus epidemic, educational informatization and information interconnection have brought new opportunities and challenges to university management and epidemic prevention and treatment. It is a milestone in the informatization of

the Institutions of higher learning and Higher education , which will bring revolutionary influence to the future education and teaching mode (5-13).

## **DISCUSSION**

Teachers can share teaching content, methods and experience online to more teachers and students. Students can also set up information groups to discuss and share course content, exchange learning methods and experiences.

The teacher is the key person and subject of information dissemination knowledge, teachers should be familiar with the application of modern educational information equipment and methods, in order to better apply in the daily teaching work and school management work. If teachers themselves are not familiar with the application of modern teaching equipment and methods, the teaching effect and level will be reduced in teaching. Even if equipped with modern equipment and instruments, but the teachers and operators will not use it, without enthusiasm, can not play the role of modern information in college education. Therefore, it is necessary to strengthen the training and education of teachers and staff in operation technology to improve their ability and technical level of applying modern educational information and methods.[5-12].

The development trend and prospect of educational informatization under the new situation The 20th National Congress of the CPC made it a point to ensure that science and technology are the primary productive forces, human resources are the primary resources, and innovation is the primary driving

force. We will fully implement the strategies of rejuvenating the country through science and education, strengthening the country through human resources, and innovation-driven development, open up new areas and new tracks for development, and constantly create new drivers and strengths for development. Based on the characteristics of the development of the Chinese times and the characteristics of the stage of development, this major statement profoundly clarifies the significance of the strategy of rejuvenating the country through science and education, and serves as an important guide for us to consolidate the basic and strategic support for building a modern socialist country in an all-round way [6-14]. .

The strategy of rejuvenating the country through science and education, adhering to the priority development of education, self-reliance in science and technology, talent guidance and drive, comprehensively improving the quality of top-notch talent innovation talent and independent training is the foundation of modern education, strategic support of an important guide to action.

Improving teachers' scientific literacy is the basis for promoting the high-quality development of science education, comprehensively improving the quality of independent training of talents, and focusing on cultivating top-notch innovative talents. Innovation is the primary driving force for development, and talent is the primary resource supporting development. Innovation-driven development is in essence talent driven. Education is the foundation and cradle of cultivating talents.[7-15].

We will strengthen education and training of innovative personnel. Education should be placed in a more important position, improve the quality of education in an all-round way, pay attention to the cultivation of students' innovation awareness and innovation ability. We will strengthen the development of mathematics, physics, chemistry, biology and other basic disciplines, and encourage colleges and universities that meet the conditions to actively set up foundations.

## CONCLUSION

With the rapid development of education information technology and Internet big data and the continuous reform of our education system, the Institutions of higher learning and Higher education , will face unprecedented opportunities and unknown challenges for sustainable development.

Under the background of the new era, the improvement of the level of science and technology and information technology provides a new opportunity and development direction for the development of colleges and universities, and the advantages displayed in the practical application provide support and impetus for the construction of the Institutions of higher learning and Higher education ,

. Educational informatization plays an important role in the administrative management and normal operation of institutions of higher learning. The big data of educational informatization is the necessary means and scientific

and effective method to improve the administrative level of institutions of higher learning. The effective, scientific, reasonable and correct application of educational informatization can greatly improve the teaching and management level of institutions of higher learning. It will bring broad prospects for the modernization of the Institutions of higher learning and Higher education .

### Reference

- 1, Li Kedong, Research Methods of Educational Technology, (M) Beijing: Peking University Press, 2003:128.
- 2, Jiang Zilin, Reflections on the Construction of University Management Information System, Model World, 2022; (19) : 139-141.
3. Li Zhen, Innovation and Exploration of Informatization of Mental Health Education in Colleges and Universities in the Internet Era -- Review of Internet Psychology ,Chinese Journal of Science and Technology, 2022; 17,5, 10016,
4. Guo Feiyang; Tang Jing, Analysis of the Reform and Progress of University Computer Education and Teaching under the Background of Information Technology (Teaching and Research) , 2021;( 2 )202-2.
5. Yan Xianpeng, The Importance and Application of Information Technology in College Student Management, China New Communication, 2022;24,7, 87-89,

6. Thinking on the improvement of logistics management quality in colleges and universities by intelligent technology, Industry and City (First half), 2022; (5) : 91-93,
- 7, Shi Yinming, Research on the role of Big Data in the development of universities and its Application Optimization Strategy, Science and Education Guide - Electronic Edition (Late), 2022; (4) 15-17,
8. Zhou Yanjun, Practice and Reflection on the Joint Construction and Sharing of University Library Information Resources, Century Star -- Communication Edition ,Published 2022;(8) 124-126,
- 9, Zhang Yu, The Application of Big Data Technology in College English Teaching, The Road to Success, 2022 (9) 7-9,
- 10, Shi Qianqian, on the Scientific Way of University Administration, China New Communication,2022; 24, (4) : 228-229,
11. Shen Bin, Exploration of Problems and core Countermeasures of Multimedia Equipment management in Colleges and Universities, Modern Vocational Education,2022; (19) : 175-177,
- 12, Fang Weihua; Liu Beibei, The Effectiveness of Using New Media to carry out College Innovation and Entrepreneurship, News Culture Construction2022; (9) : 87-89,
13. Ren Youqun, Subject Teacher is the key to the integration of Technology and Teaching (N). China Education Journal, 2013-11-29, (008)

14. Yu Shengquan, Promoting the Two-way Integration of Technology and Education \_, (Ten-year Development Plan for Education Informatization (2011\_2020) (J). China Audio-visual Education, 2012, (5) : 5-14.

15. Yu Shengquan, Promoting the Two-way Integration of Technology and Education \_, (Ten-year Development Plan for Education Informatization (2011\_2020) (J). China Audio-visual Education, 2012, (5) : 5-14.

16. Sormunen, Marjorita , RN;Heikkila, Asta PhD, RN;Salminen, Leena PhD, et al ,

Learning Outcomes of Digital Learning Interventions in Higher Education: A Scoping Review.[Article] CIN: Computers, Informatics, Nursing,2022;40.(3):154-164

17. Montathar Faraon;Kari Rönkkö;Mikael Wiberg et al ;Learning by coding: A sociocultural approach to teaching web development in higher education ,Education and Information Technologies,2019; 1-25, 【doi】 10.1007/s10639-019-10037-x

18. Zheng, Yunxiang,Li, Haozhen,Zheng, Tianxiang ,Performance Evaluation of ICT-Based Teaching and Learning in Higher Education, Lecture Notes in Computer Science.2018; 10949,378-390,20 . 【doi】 10.1007/978-3-319-94505-7\_31.

19. Odinokaya, Maria;Krepkaia, Tatyana;Sheredekina, Oksana,et al .The culture of professional self-realization as a fundamental factor of students' internet communication in the modern educational environment of higher education(Article)2019 ; 9,(3):187.