

Innovation Path of Educational Economic Management under the Background of Informatization

Dong Wang

Liaoning Communication University, Shenyang, 110000, Liaoning, China

wd_0930@sina.com

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Abstract: This article aims to explore the innovative path of educational economic management under the background of informatization. This article deeply analyzes the present situation, problems and challenges of educational economic management informatization, and puts forward targeted innovation strategies. It is found that informatization plays an important role in improving the efficiency of educational economic management and optimizing resource allocation, but there are also problems such as data security and teachers' lack of information literacy. Based on this, this article puts forward some suggestions such as strengthening the construction of information infrastructure, improving teachers' information literacy, and building an economic management platform for smart education. The results of this article not only provide practical guidance for educational institutions, but also point out the direction for future research. In the future, with the support of big data, cloud computing and other technologies, the informatization of educational economic management will achieve more refined and intelligent management, and make greater contributions to improving the quality of education and management efficiency.

1. Introduction

With the rapid development of information technology, informatization has penetrated into all fields of social life [1]. In the field of education, the promotion of informatization is changing the traditional education mode and education management mode [2]. Especially in the economic management of education, informatization not only provides a more efficient means of data processing and analysis, but also brings new possibilities for optimizing the allocation of resources and improving the quality of education [3-4]. Therefore, it is of great practical significance to explore the innovative path of educational economic management under the background of informatization for improving the efficiency of educational management and optimizing the allocation of educational resources in China.

The purpose of this study is to deeply explore the influence of informatization on educational economic management, analyze the existing problems and challenges, and put forward targeted innovation paths. Specific research questions include: How does informatization affect educational economic management? What are the new challenges and opportunities for educational economic management under the background of informatization? How to meet these challenges and seize opportunities through innovative paths?

2. Informatization of educational economic management

Informatization refers to the process of making full use and sharing of information resources based on modern information technology, thus improving work efficiency and decision-making level [5]. In the field of education, the application of informatization is mainly reflected in teaching management, educational resource management and student information management. Through information technology, educational institutions can manage teaching resources more efficiently, improve teaching quality and realize educational equity.

Educational economic management involves the allocation of educational resources, the raising

and use of educational funds, and the evaluation of educational benefits. Its basic theories include educational economics theory, educational management theory and educational policy theory [6]. These theories provide scientific guidance and methodological support for educational economic management.

Informatization has had a far-reaching impact on educational economic management: informatization has improved the efficiency and accuracy of educational economic management, enabling educational institutions to grasp the use of educational resources more accurately; Informatization promotes the sharing and optimal allocation of educational resources and helps to narrow the educational gap between regions and between urban and rural areas; Informatization provides a new decision-making support means for educational economic management, which is helpful to realize scientific and democratic decision-making. At present, educational informatization is developing in the direction of intelligence, personalization and open sharing. However, there are also many challenges in this process, such as information security, the integration of technology application and educational ideas, and the uneven distribution of educational resources [7-8]. These challenges need the joint efforts of educational institutions, the government and all sectors of society to overcome.

3. Analysis on the present situation of educational economic management under the background of informationization

In the process of promoting the informatization of educational economic management, various regions and schools have taken various measures to adapt and utilize the informatization technology [9]. At present, the main methods include the following aspects: (1) Digital campus construction: by building a digital campus and integrating various information resources within the school, the informationization of educational administration, student management and teaching resource management can be realized. (2) Online teaching and management platform: Use online platform to share teaching resources, submit and correct homework, and take online exams, so as to improve teaching efficiency and management convenience. (3) Education Big Data Analysis: By collecting and analyzing students' learning data and teachers' teaching data, it provides data support for teaching management and helps schools make more scientific decisions. (4) Electronic payment and financial system: electronic payment is adopted to handle tuition fees and book fees, and a financial system is established to monitor the flow and use of funds in real time.

Although the informationization of educational economic management has achieved certain results, there are still many problems and dilemmas [10]. As shown in Figure 1:

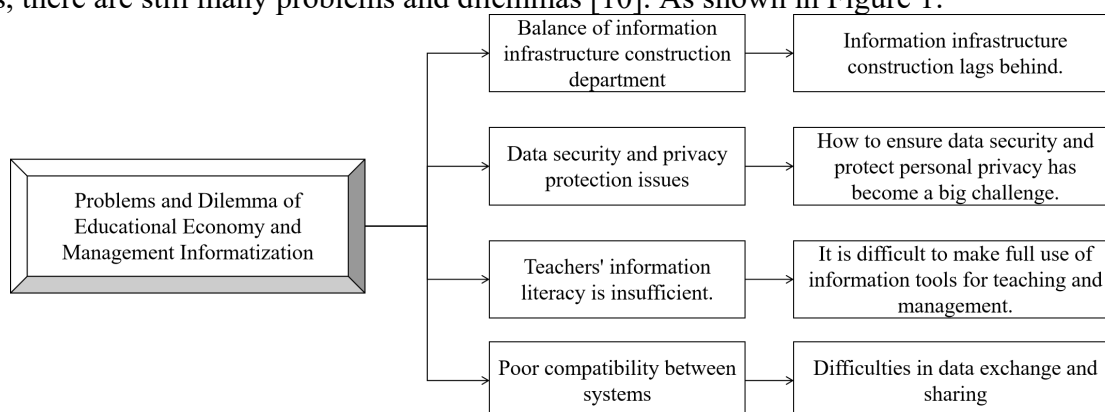


Figure 1 Problems and challenges in informationization of educational economic management

Informatization has a significant impact on the allocation of educational resources: (1) Optimal allocation of resources: Through data analysis, we can more accurately understand the educational needs of various regions and schools, thus realizing the rational allocation of educational resources. (2) Resource sharing: Information technology enables high-quality educational resources (such as courses for famous teachers and teaching materials) to be shared in a wider range, improving resource utilization efficiency. (3) Reduce the waste of resources: By monitoring and analyzing the

use of educational resources in real time, excessive investment and waste of resources can be avoided.

4. Innovative paths for educational economic management under the background of informatization

(1) Innovative ideas and strategies of educational economic management

Under the background of information age, the traditional educational economic management concept has been difficult to adapt to the rapidly developing educational needs. Therefore, we must innovate ideas and strategies, take data-driven as the core, and rebuild the educational economic management system. This means that it is needed to extract valuable information from massive data, and make decisions on this basis to ensure the scientific and forward-looking management strategy. Moreover, we should also pay attention to the real-time updating and dynamic analysis of data, so as to adjust the management strategy in time and maintain the flexibility and adaptability of educational economic management. Through innovative ideas and strategies, we can better cope with the challenges brought by informatization and promote the development of educational economic management in a more efficient and refined direction.

In order to implement this data-driven management concept, universities need to establish a perfect data collection and analysis system. This includes comprehensive and systematic collection of students' learning data, teachers' teaching data and school operation data, and in-depth mining and analysis of these data by using advanced data analysis technology. In this way, we can more accurately understand the actual situation of educational economic management, find the existing problems and potential risks, and thus formulate more targeted management strategies.

(2) Optimize the allocation of educational resources by using big data and cloud computing

Big data analysis can help us gain insight into educational needs and resource utilization, so as to make a more accurate resource allocation plan. Through the analysis of key information such as students' learning data and teachers' teaching resources, relevant personnel can know which resources are in short supply and which resources are surplus, and then make reasonable allocation.

Moreover, cloud computing technology provides powerful computing and storage capabilities for processing and analyzing these large-scale data. With the help of cloud computing, we can quickly process and analyze massive educational data, extract valuable information, and provide scientific basis for the allocation of educational resources. This not only improves the efficiency of resource allocation, but also ensures the rationality of resource allocation, which is helpful to realize the maximum utilization of educational resources.

(3) Building an economic management platform for smart education.

In order to realize the informationization of educational economic management, it is very important to build a smart educational economic management platform. This platform should be a comprehensive system, which can integrate many core modules, such as educational administration, student management and financial management, to ensure the efficient coordination of various management work. Through the data sharing and interactive function of the platform, managers can obtain all the key data in real time, and conduct comprehensive monitoring and evaluation of education.

In addition, the platform should also have intelligent decision support function. Using advanced data analysis and artificial intelligence technology, the platform can provide scientific and reasonable decision-making suggestions for managers and help them better cope with the complex and changeable educational economic management environment. In this way, managers can not only improve work efficiency, but also ensure the accuracy and effectiveness of decisions.

(4) Strengthen the training and introduction of information talents.

Under the background of informatization, the key to improve the informatization level of educational economic management lies in strengthening the cultivation and introduction of informatization talents. First of all, relevant personnel need to pay attention to the information training of existing educators. By organizing regular training courses and seminars, we can improve their information literacy and technology application ability. In this way, they can better adapt to

the information-based working environment and make full use of information technology to improve work efficiency and quality. Secondly, relevant personnel should also actively introduce talents with information background and professional skills. These talents not only have rich information technology knowledge, but also can bring new ideas and methods for educational economic management. Through their participation, we can further promote the informationization process of educational economic management and realize more efficient and meticulous management.

(5) Improve the educational economic management mechanism under the background of informationization.

Under the background of informationization, it is very important to improve the educational economic management mechanism. The improvement strategy of educational economic management mechanism under the background of informationization is shown in Figure 2.

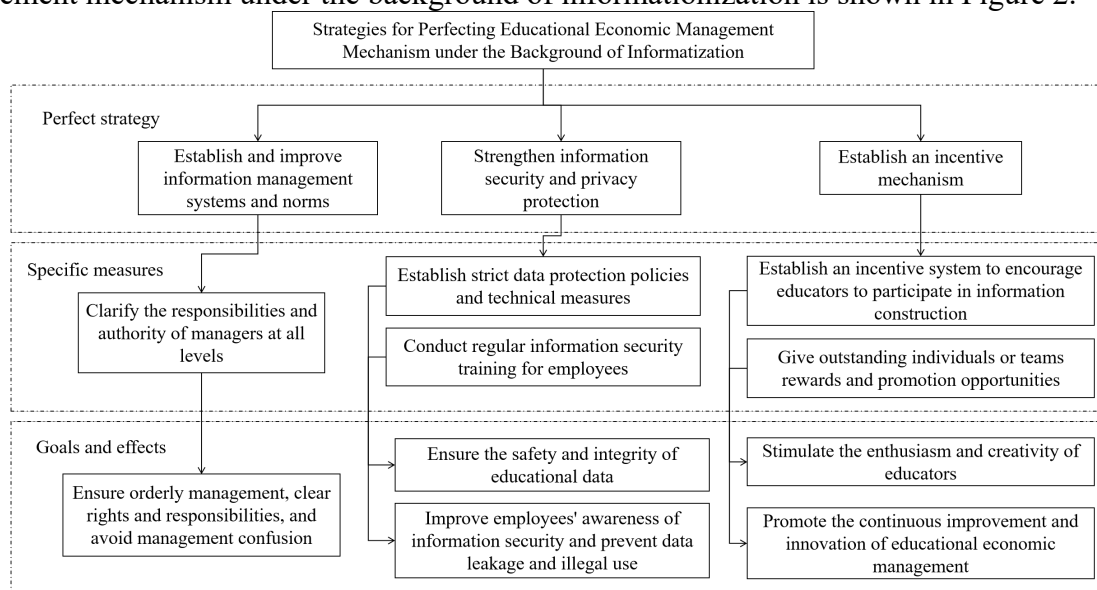


Figure 2 Improvement strategies of educational economic management mechanism under the background of informationization

First of all, it is needed to establish and improve the information management system and norms, and clarify the responsibilities and authority of managers at all levels. This can ensure the orderly management work and avoid unclear rights and responsibilities and chaotic management. Secondly, strengthening information security and privacy protection is also an important link to improve the management mechanism. Relevant personnel need to establish strict data protection policies and technical measures to ensure the safety and integrity of educational data. Moreover, employees should be regularly trained in information security to improve their awareness of information security and prevent data from being leaked and illegally used. Finally, the establishment of incentive mechanism is also an important part of improving management mechanism. Relevant personnel can set up a reward system to encourage educators to actively participate in information construction and application. By giving appropriate rewards and promotion opportunities to outstanding individuals or teams, their enthusiasm and creativity can be stimulated and the continuous improvement and innovation of educational economic management can be promoted.

5. Conclusions

Through in-depth analysis of the current situation of educational economic management under the background of informationization, this study reveals the existing problems and challenges, and puts forward targeted innovation paths. The main findings include: the informatization of educational economic management plays a significant role in improving efficiency and optimizing resource allocation, but it also faces challenges such as data security and insufficient information literacy of teachers. Based on the above findings, this study puts forward the following suggestions:

educational institutions should increase the construction of information infrastructure to ensure the balanced distribution of resources; Strengthen data security protection and formulate strict data management and privacy protection policies; Improve teachers' information literacy and organize information skills training regularly; Construct and improve the economic management platform of smart education, and realize real-time data analysis and decision support.

With the continuous development of information technology, the informationization of educational economic management will usher in a broader application prospect. In the future, educational institutions will rely more on advanced technologies such as big data and cloud computing for refined management, so as to realize the optimal allocation and efficient utilization of educational resources. Moreover, with the application of artificial intelligence technology, educational economic management will be more intelligent, which will provide strong support for improving educational quality and management efficiency.

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