ANALYZING THE VALUE OF EDUCATIONAL MANAGEMENT RESEARCH IN HIGHER EDUCATION INSTITUTIONS

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Abstract

This study analyzes the current situation of education management informatization construction in higher education institutions, analyzes its problems as well as relevant foreign experiences and some domestic measures worthy of reference, and puts forward requirements and countermeasures. The study is conducted by questionnaire, literature and interview methods. To accomplish the most core and urgent task of improving the quality of higher education at present, it is necessary to take the path of internal development featuring science. To this end, each specialty should study the knowledge system and problem space of the discipline, etc., and construct the curriculum system scientifically according to the development of the discipline and society, the characteristics of the specialty itself, as well as the composition of the professionals' abilities and the disciplinary approach, aiming to achieve the training objectives. And according to the basic orientation of the curriculum, the knowledge is used as a carrier to cultivate students' professional abilities and qualities and actively guide graduates to achieve the training objectives. The rapid development of science in a digitally driven context has also driven continuous innovation of traditional educational concepts. The times call for the necessity to improve education and teaching methods, to explore higher education teaching models by developing students' personalities and to adapt to the needs of modern society's talent training. With the help of Internet and big data, the informatization of Chinese higher education institutions has been developed rapidly.

Keywords: higher education institutions, education management, informatization

Introduction

Problem statement

The basic professional education of higher education is positioned differently, facing the future, reflecting the basic attributes of higher education, emphasizing sustainable development, oriented to ability cultivation, highlighting the scientific nature of professional education, pursuing its effectiveness and efficiency, and wanting to promote the cultivation of high-quality talents. To accomplish the most central and urgent task of improving the quality of higher education at present, we must take the path of internal development specialising in science. In the context of digitally driven, the rapid development of science has also promoted the continuous innovation of traditional education concepts, and the times require that education

and teaching methods must be improved to develop students' personalities to explore teaching models in higher education to meet the needs of modern society's talent training. In 2015, the Vice Premier of the State Council focused on the deployment of education management informatization construction work, proposing to make full use of information technology to ensure that education management work is completed in quality and quantity, and to promote the high-quality completion of China's applied technical personnel training work [1]. The integration of higher vocational education with informatization is the focus of the current education reform and an important issue in China's education reform. In the 13th Five-Year Plan, it is pointed out that advanced informatization technology should be used to ensure the steady development of higher vocational education in China [2].

Research Objectives

1. This paper finds that the informatization construction of higher education institutions is mostly at the stage of practice and exploration.

2. This paper focuses on analyzing the current situation, effectiveness, and problems of informatization construction in higher education institutions,

3. Finally proposes strategies, hoping to provide reference for the informatization construction of higher education institutions in China and make a modest contribution.

4. To understand the shortcomings of informatization construction in higher vocational institutions, draws on the advanced experience of informatization construction at home and abroad, improves the informatization construction system of higher vocational institutions.

5. To guide the informatization construction work of higher vocational institutions in China.

Research hypothesis

H1: Teacher and student feedback will affect the financial investment in information technology construction in higher education institutions will affect the information technology construction in higher education institutions.

H2: Financial investment will affect the informatization construction of higher education institutions.

H3: The problems of unbalanced development and imperfect management mechanism of informatization construction in higher education institutions can be solved.

Limitations and scope of the study

The survey subjects were divided into freshmen and sophomore school students; full-time teachers, divided into teachers of professional courses and teachers of public courses; and teaching managers, divided into teaching managers of colleges and teaching managers of schools. The satisfaction level of teachers and students with the corresponding indicators before

and after the construction of information technology in school education management was investigated respectively. Also, because of limitations in human and financial resources, we may only be able to select populations that meet the inclusion criteria within our capacity, and not all populations from all regions.

Benefits and importance of the research

The comprehensive construction of management systems and information platforms not only can effectively integrate information, but also provide data support for various types of education management, ensure the effectiveness of various types of information integration and application, meet the long-term development requirements of higher education institutions, truly reflect the actual value of digital applications, and provide the basis for the development of various types of work in higher education institutions. It can truly reflect the actual value of digital application and provide the basis for the development of various work in higher education institutions.

Theory and Literature Review

Based on the "scientific management" theory and the theory of synergy, this paper included on higher education management, Management of education and teaching in higher education institutions.

Higher education management

Although different scholars have different views on the concept of higher education management, they are similar in their understanding of the issue of the core of higher education management. Conceptually, higher education management refers to the regulation of the various relationships in the higher education system and the allocation of resources in accordance with the purpose of higher education and the law of development, guided by rational and scientific theories, so that the purpose of higher education can be achieved. It is therefore the task of higher education management to reconcile and manage the various conflicts in the higher education system. In the development of higher education, all aspects of higher education need to be scientifically designed in order to optimise its elements in a holistic manner. The coordination of resources and relationships in the higher education system is part of the work of higher education management, and it is only with scientific, effective and rational education management that the substantive aim of training excellent applied talents can be achieved.

Management of education and teaching in higher education institutions

Higher education institutions refer to higher vocational institutions, including higher vocational colleges and colleges of higher education. Higher vocational education is higher

education and the advanced stage of vocational and technical education. Since higher vocational education is not the same as secondary education and general higher education, the informatization of education management should be in line with the development characteristics of higher vocational colleges and universities and be adapted to local conditions.

Informatization of education management in higher vocational education institutions

Information is the basis of decision making, which means that in order to make scientific and reasonable enough decisions, it is necessary to have enough accurate information as reference. This is also true in education decision-making. In a simple overview, informatization of education management refers to the scientific use of information technology in the process of teaching management, and the development and utilization of educational information resources are given priority.

Conceptual Framework

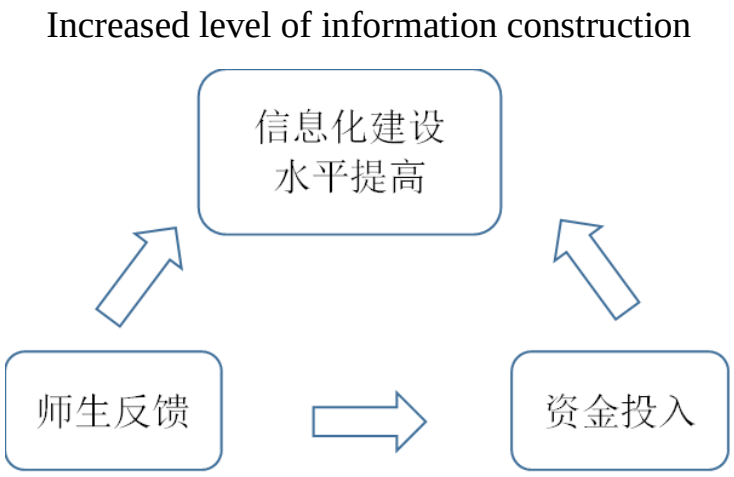

Figure 1.1: The conceptual framework of this study

Research Methodology

A survey was conducted using a self-administered questionnaire, supplemented by interviews, with the aim of clarifying the extent of teachers' and students' recognition of information technology in education management, combining it with literature, identifying problems and proposing countermeasures.

Population and Sample Sizes

The survey was conducted with a random sample of students, teachers and teaching managers, and questionnaires were distributed. The sample sizes are 625 samples, 592 students, (155 by freshmen and 205 by sophomores), 162 by teachers of professional courses and 56 by teachers of public courses, 70 by teaching managers. The respondents were divided into freshmen and sophomore students; full-time teachers; and teaching administrators.

Data collection

A total of 625 questionnaires were distributed and 601 questionnaires were collected on site, with a recovery rate of 96%, of which 592 were valid questionnaires, with an efficiency rate of 95%. 360 questionnaires were answered by students, accounting for 60.81% of the 592 valid questionnaires, of which 155 were answered by freshmen and 205 by sophomores; 162 questionnaires were answered by teachers, accounting for 27.36% of the total questionnaires, of which 106 were answered by teachers of professional courses and 56 by teachers of public courses. A total of 162 questionnaires were answered by teachers, accounting for 27.36%, including 106 by teachers of professional courses and 56 by teachers of public courses; 70 questionnaires were answered by teaching managers, accounting for 11.82%, including 51 by teaching managers of the college and 19 by teaching managers of the university.

Data preparation and data analysis

The data were analysed using SPSS 22.0 software. Measures were expressed as mean ± standard deviation ($x \pm s$) and t-tests were performed. The percentages of count data were expressed as n (%) and a chi-square test was performed. $p<0.05$ was considered a statistically significant difference.

Results of data analysis

General information of the survey respondents

The analysis of the general information of the respondents. Firstly, the analysis of the general information of the students showed that there was a statistically significant difference in the mean age of the freshmen and sophomore students ($P<0.05$). Further comparison revealed that there was no statistically significant difference in the gender composition between first- and second-year students ($p>0.05$). Secondly, there was no statistically significant difference in the mean age and gender composition of the teachers of the professional courses and the teachers of the public courses ($p>0.05$). When comparing the number of years of teaching experience between the two, no statistically significant difference was found between the number of years of teaching experience of specialist and public course teachers ($p>0.05$). Finally, when comparing the general information of college administrators and school administrators, the differences in mean age and gender composition were not statistically significant ($p>0.05$). Comparing the number of years of academic management between the two, the difference in the number of years of academic management between the college managers and the school managers was found to be statistically significant ($p<0.05$).

Students' satisfaction with the construction of information technology in education management

The difference between the satisfaction scores of the paperless leave system before and after the construction is statistically significant ($P<0.05$). When comparing the satisfaction with the book lending system, it was found that there was no statistically significant difference between the satisfaction scores of the book lending system before and after the construction ($P>0.05$). There was no statistically significant difference in satisfaction scores between the pre-construction and post-construction access control system, the one-card system and the financial consumption system ($p<0.05$). Finally, comparing the satisfaction of the multi-linked

system, it was found that 46.11% (166/360) of students were satisfied with the financial consumption system before construction and 48.61% (175/360) were satisfied with the financial consumption system after construction, and the difference in satisfaction with the financial consumption system before and after construction was not statistically significant ($p>0.05$).

Teachers' satisfaction with the construction of information technology in education management

Analysis of teachers' satisfaction with the construction of education management information technology is shown in Table 3. there is a statistically significant difference between the satisfaction scores of the payroll system system, leave system and attendance system before and after the construction ($P<0.05$). There was no statistically significant difference in satisfaction with the personnel file management system and the paperless reporting system compared before construction ($P>0.05$). Finally, comparing the satisfaction of the promotion system, it was found that 36.421% (59/162) of teachers were satisfied with the promotion system before the construction, and 40.74% (66/162) of teachers were satisfied with the promotion system after the construction, and the difference in satisfaction with the promotion system before and after the construction was not statistically significant ($P>0.05$).

Satisfaction of academic administrators with the information technology construction of education management

The satisfaction of academic administrators with the information technology construction of education management is analyzed in Table 4. there was no statistically significant difference between the satisfaction scores of the paperless class transfer system before and after construction ($p<0.05$). Comparing satisfaction with the intelligent lecture platform, course selection system, information management system and assessment system, it was found that there was no statistically significant difference between the satisfaction scores of student course selection system, information management system and assessment system before and after the construction ($P>0.05$).

Unbalanced development of informatization construction

China's economic development is uneven, in some economically less developed areas of higher education institutions limited by the financial situation of the school, in the process of information technology construction of basic software, hardware facilities difficult to meet the requirements of the corresponding information technology construction requirements. In addition, although some higher education institutions are more complete in the establishment of informatization, it is difficult to achieve the effect of informatization in the practical application, such as the lack of training system, incentive measures, insufficient construction of intelligent teaching platform and weak security capability [7].

The management mechanism of informatization construction is not perfect

At present, the information management of China's higher education institutions is still at the stage of decentralized block, and there is no holistic concept yet, thus restricting the innovation of China's teaching management work. For example, safety management, personnel

management, logistics management, data control, library management and vehicle management are all managed independently, without realizing the sharing of resources and giving full play to the advantages of informatization. In addition, the distribution of information technology resources is in an uneven state, with the focus mostly on teaching information and less resources allocated to security, trade unions, logistics and other departments, and the information technology management is under-constructed in terms of co-ordination, making it difficult to form a whole [8].

Inadequate guarantee system of informatization construction measures

At present, the informatization construction process in higher education institutions needs to strengthen the supervision measures and the guarantee system needs to be further improved, for example, the procurement quantity and list are unreasonable, the investigation is not sufficient, the procurement is not done due to the need and reasonableness, the lack of attention to the price, the lack of supervision after the completion of the procurement, the lack of acceptance after the completion of the installation, and the lack of technical training for teachers and students [9].

Active top-level design of information technology construction

Top-level design has the basic characteristics of scientific, strategic and long-term, which can ensure that the project goals and management objectives can be realized quickly. First of all, higher education institutions should formulate scientific strategic planning, build a centralized and scientifically decentralized investment mechanism, optimize the fund allocation process; start from user participation and governance structure, governance structure, sound decision-making mechanism, and through the user-oriented development concept, innovate the governance model, so that education governance presents the characteristics of democratization, flexibility and joint participation of multiple subjects.

Strengthen the construction of information technology talents

Higher education institutions should establish training bases for informatization technology under the guidance of national policies, conduct capability training with the help of the Internet, informatization technology and multimedia technology, and train a group of technical backbones to master new working methods and techniques to ensure that informatization construction in higher education institutions can develop smoothly. School-based training, research regions and teachers' elective learning can be chosen to establish a team of informatization talents, so that informatization can be integrated into the core of teaching management content [10].

Conclusion, Discussion and Recommendations

Summary of research findings

Through the survey of teachers and students and the review of literature, higher education institutions have made some achievements in the informatization of education management, such as the informatization of teaching affairs and teaching management, which makes education management more standardized and scientific, and the efficiency of work is improved. In addition, there may be problems of unbalanced development of information

technology construction and unsound system of guarantee measures in the process of information technology construction of teaching management in higher education institutions. The research in this paper has a certain reference role in the construction of information technology for education management. By strengthening the construction of informatization personnel and establishing an organizational guarantee system for education management informatization let both teachers and students enjoy the convenient learning and office in informatization.

Discussion

Through this thesis writing, through actual interviews and research, we have got rid of theoretical knowledge and paid more attention to practice, improved the ability to consult literature, synthesized knowledge, exercised the ability to solve problems, and gained a deeper understanding of the process of education management informatization construction in higher education institutions. I hope this paper can play the role of a brick to attract jade, and can play a certain role in promoting the construction of education management informatization in China's higher education institutions. However, my ability is limited, the sample of the survey is small, and the understanding of the contribution is insufficient, so there are still shortcomings in this paper, and some superficial suggestions and conclusions are drawn. I hope that I can get a more systematic conclusion about the construction of education management informatization in my future work and study.

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