ANALYZING THE VALUE OF EDUCATIONAL MANAGEMENT RESEARCH IN HIGHER EDUCATION INSTITUTIONS

by

XIALOIANG ZHOU

AN INDEPENDENT STUDY SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF MASTER OF EDUCATION IN EDUCATIONAL ADMINISTRATION (INTERNATIONAL PROGRAM)

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ABSTRACT

This study analyses the current situation of information construction of educational management in higher vocational colleges, analyzes its problems, as well as relevant foreign experiences and some domestic measures worthy of reference, and puts forward requirements and countermeasures. At the same time, it points out that there are problems of unbalanced development of informatization construction, insufficient management mechanism and inadequate system of guaranteed measures. The corresponding countermeasures are proposed, mainly for implementing the synergistic development of educational management and informatization construction, strengthening the construction of informatization talents, establishing school-based informatization resources and platforms, and establishing an organizational guaranteed system for educational management informatization.

Keywords: higher education, educational management, informatization

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Chapter 1

Introduction

1.1 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 competence training, highlighting the scientific nature of professional education, pursuing its effectiveness and efficiency, and 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. To this end, the majors should study the knowledge system of the discipline, the problem space, etc., and construct the curriculum system scientifically according to the development of the discipline and society, the characteristics of the majors themselves, as well as the composition of the competence of the professionals and the disciplinary approach, aiming at achieving the training objectives. And according to the basic orientation of the curriculum, knowledge is used as a carrier to cultivate students' professional abilities and qualities and actively guide graduates to achieve their training goals. In the digitally driven context, the rapid development of science has also driven the continuous innovation of traditional educational concepts. The times demand that education and teaching methods must be improved in order to develop students'

personalities to explore teaching models in the higher education teaching mode and adapt to the needs of modern society's talent training.

With the development of the Internet and the application of information technology, China's higher education institutions are facing challenges and opportunities in the management of information technology. With the help of the Internet and big data, the information construction of higher education institutions in China has seen rapid development. Using such technologies, financial, student, academic and personnel records are systematically organised and classified to achieve information sharing and reliable data, which ultimately improves the efficiency of education management in higher education institutions and provides a basis for management decisions, quality analysis and talent training. However, while information technology provides higher education institutions with efficient management, it also brings new challenges, such as the demand for various types of talents, job innovation, management structure iteration and competition for students. Therefore, in this new era, higher education institutions should make full use of the strengths of information technology to coordinate education management and construction, safeguard education quality, enhance work efficiency and ultimately cultivate applied talents that meet the needs of society.

In 2012, China held a working conference on education informatization via teleconference, and since then, China has opened a period of rapid development of education informatization. President Xi inspected the construction of education

management information at Beijing Normal University in 2014, and in 2015, the Vice Premier of the State Council focused on the deployment of education management informatization, 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]. At present, under the guidance of the national policy, most higher education institutions have started to build education management informatization, carry out innovative teaching, combine education with informatization, make education mode innovation, and improve the quality of talent training. Safety, human resources, services, resources and environment are all important prerequisites for informatisation. In the 13th Five-Year Plan, it is pointed out that advanced information technology should be used to ensure the steady development of higher vocational education in China[2]. Higher vocational institutions should fully understand the importance of network software platform and education management informatization, share and build a common resource platform, strengthen effective communication between efficient and effective, and connect China's vocational education with international standards, so the construction of education management informatization is very important.

1.2 Research Objectives

Theoretical significance: Although China's vocational education informatization construction has made certain achievements, there are still some shortcomings

compared with foreign countries. Through designing questionnaires, reviewing literature and interviewing experts, this paper finds that the informatization construction of higher education institutions is mostly at the stage of practice and exploration. This paper focuses on analyzing the current situation, effectiveness and problems of informatization construction in higher education institutions, and finally proposes strategies, hoping to provide reference for the informatization construction of higher education institutions in China and make a modest contribution.

Practical significance: China's higher vocational colleges and universities have trivial work, large numbers of people, huge educational management, a wide range of experimental equipment and facilities, diversified schooling and expanding scale bring great challenges to traditional educational management, and traditional educational management also leads to low efficiency, poor effectiveness and information lag in the management of vocational colleges and universities. This paper uses questionnaires 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, and hopes to guide the informatization construction work of higher vocational institutions in China.

1.3 Research hypothesis

Based on the review and summary of relevant theories and previous empirical studies in the literature review, combined with the purpose, research

questions and research structure of this study, the specific hypotheses of this study are summarised as follows.

H1:Based on the review and summary of relevant theories and previous empirical studies in the literature review, combined with the purpose, research questions and research structure of this study, the specific hypotheses of this study are summarised as follows: 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::Based on the review and summary of relevant theories and previous empirical studies in the literature review, combined with the purpose, research questions and research structure of this study, the specific hypotheses of this study are summarised as follows: financial investment will affect the informatization construction of higher education institutions.

H3::Based on the review and summary of relevant theories and previous empirical studies in the literature review, combined with the purpose, research questions and research structure of this study, the specific hypotheses of this study are summarized as follows: the problems of unbalanced development and imperfect management mechanism of informatization construction in higher education institutions can be solved.

1.4 Limitations and scope of the study

1.4.1 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.

1.4.2 Limitations of this study

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. However, there is relatively little data on the population in different regions, and the findings are not very representative through online channels of research. The time frame was short and the research method was relatively homogeneous. Due to the epidemic, only web-based research could be conducted.

Solution: Expanded web-based questionnaires could be conducted, with multiple regions. Extend the research time to make the study more refined and accurate.

1.5 Research terms

Informatization of higher education: mainly refers to the workflow informatization of the management system. The promotion and implementation of

the training school management system is not only fundamental to help the training school build a perfect informatization system, but more importantly to give this school an advanced management concept, so that the training school management system and the training school informatization can be combined more closely.

Digitisation: The 19th National Congress report introduced the concept of digital economy for the first time. On the other hand, concepts such as new media, which were prevalent in the past, are gradually being marginalised. While the concept of digitalisation is being used constantly. In the era of big data, both the digitisation of companies and the data-based thinking that operators often talk about are in vogue. Big data, which has been called the number one mindset for business operations by the industry's pluralists, is important in its own right, as is the concept itself, but it is more important to have a landable and executable operation. Hence, while industry players talk about so-called digitalisation and data thinking. The practical implications and broader impetus of digitalisation, telecommuting, lightweight services and the need to transform traditional businesses continued to surge throughout the year. Digital transformation is a strategy for companies to digitise their business models, operational processes and management systems with the basic goal of improving their competitiveness, based on digital technology and using data as the core. It is a targeted effort. Digitalisation is the application of technological innovation in other areas, with the ultimate aim that many changes in business models require technology, and each change gives

rise to a new business model. A business model is a description of how an organisation performs its functions, a summary of its main activities, defining the company's customers, products and services.

Database: A database is a collection of related data stored together that is structured, free of harmful or unnecessary redundancies, and serves multiple applications; the data is backed up independently of the programs that use it; new data can be inserted and modified in the database, and the original data can also be retrieved. A system consists of a "database set" if there are structurally completely separate hypothetical databases in the system.

1.6 Benefits and importance of the research

Education management informatisation can be based on the entire network system, building an IoT scenario within the campus, integrating various types of information to provide effective data support for education service management, effectively improving the traditional paper-based form of education management through the transformation of data and digitalisation, highly integrating and analysing various types of information based on the digital form, and relying on the directional control structure of the main system to achieve The digital form provides a high degree of integration and analysis of all types of information, and can be used to coordinate the processing of terminal service settings and further improve the efficiency of resource utilisation in education management. At the same time, the realisation of management informatisation can meet the challenges of the dramatic

increase in information resources in the era of big data, build a real-time, shared information platform, logical and orderly computing of massive amounts of data, and use education management as a digital means of regulation and control, playing a supporting role for the relevant educational functions. In the long term, education informatization is an inevitable trend of education reform. 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.

Chapter 2

Theory and Literature Review

2.1 Concepts and theories

2.1.1 Definition of core concepts

2.1.1.1 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. Therefore, if we look at it from a micro perspective, higher education refers to the coordination of the

conflicts existing in a certain sub-system according to the laws of teaching and learning in the macro higher education management, so that some of the many objectives of higher education can be achieved; if we look at it from a macro perspective, higher education management refers to the use of various means to control the conflicts existing in the higher education system in the context of the national education policy and social development, so as to make the higher education system The management of higher education refers to the use of a variety of tools to control conflicts in the higher education system in the context of national educational policies and social development, in order to achieve its multiple objectives, including the training of human resources.

2.1.1.2 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.

(1) The student population of higher vocational colleges is complicated

Because of the fertility policy, economic development and national policy,

the student source of higher vocational colleges is diversified and the enrollment involves a wider geographical area. At present, the student sources of higher vocational colleges include: general high school general admission, general high school registration, counterpart single enrollment, order training, secondary school, social enrollment, adult correspondence course, sectional training and international enrollment. The complexity of student sources increases the workload and difficulty of student management, while the information-based student work management can effectively solve this problem.

(2) Practising application-oriented talent cultivation objectives

The cultivation objectives of higher vocational institutions are always changing. No matter how they change, the words "practicality", "application", "high skills" and "high quality The words "practicality", "application", "high skills" and "high quality" are often found in the talent training plans of higher vocational schools. Generally speaking, higher vocational education favours the cultivation of practical ability, which is different from the talents cultivated by ordinary higher education. Students enter corporate enterprises after two or two and a half years of study in higher education institutions to participate in social practice and experience, applying the written knowledge they have learned in school to their practical work and improving their skills.

(3) Faculty structure with increasing academic titles

The faculty construction in higher education institutions has developed

rapidly in recent years, and the proportion of graduate students, doctoral students, associate professors and professors in the faculty team has been increasing. According to the objectives of higher education personnel training explained above, the faculty of higher education institutions consists of administrative staff, full-time teachers, part-time teachers, visiting professors, and professional and technical staff of school-based resident school-enterprise cooperation, and these education managers and workers need information technology training to better use advanced technology to carry out their work.

The management of higher education institutions refers to the regulation of the resources and relationships that higher education institutions have in accordance with the laws of professional development, etc., while using teaching and education as a guiding principle, etc., to set up majors according to the student market situation and the education and teaching situation, and to manage the teaching system, plans, processes and quality efficiently, to build a teaching team with both professional and practical abilities, to pay close attention to student recruitment, registration and employment management The aim is to improve the quality of education in order to effectively achieve the established purpose of higher vocational education to cultivate high-level specialists of all levels.

2.1.1.3 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.

The construction of higher vocational education management informatization is a way for higher vocational education institutions to build consensus on building higher vocational education management informatization based on the network environment, and to use information technology and information resources to promote further development and reform of education and teaching, so as to modernize higher vocational education and governance and meet the needs of the times and society for higher vocational education. From ancient times to the present, the fundamental purpose of any teaching organisation is to cultivate talents. In today's society, it is necessary for higher vocational institutions to add information literacy to their educational objectives in order to serve them, which is very important for cultivating talents who can adapt to the information society; to strengthen the use of information technology in teaching management and scientific research, and to bring the role and value of educational information resources into play as far as possible; to modernise the means of teaching management, informationisation of educational resources and dissemination methods; and to In the process of education management, the use of modern information technology

should be strengthened to improve teachers' awareness of information technology and their ability to use it, so that they can adapt to the requirements of an information-based society and train applied talents for society who are familiar with the operation of information technology and have other professional qualities.

2.1.2 Basic theories

2.1.2.1 The "scientific management" theory

The theory is that the aim is to increase the productivity of the company's workforce, to make the best use of people's talents and to achieve maximum efficiency as quickly as possible; the managers must replace old-fashioned personal judgements and opinions with accurate scientific research and knowledge, while removing many incorrect and unnecessary actions, so that the daily workload standards can be updated and made more scientific and rational; in order for the daily workload standards to be set In other words, whether it is the management of tools, raw materials, inspection methods or processes, standards must be set; in order to manage workers in a standardised way, it is necessary to train them before they start work so that they are in line with the standards set by the company. Scientific management is, in a way, a psychological revolution, so that management and workers have to get along, work together and focus on increasing the surplus. In general, since the emergence of scientific management as a theory, the previous empirical management model has been eliminated and replaced by the scientific management model.

2.1.2.2 The theory of synergy

In synergy theory, even though there are differences in the properties of different systems in the world, there is also a need to realise that systems cooperate and can influence each other. It is also the case that a number of subsystems form a system, and it is the synergy of the subsystems that is dominant, which, when viewed as a whole, can manifest itself in a certain structure or a certain function. For example, synergy occurs when the various subsystems within a system are able to work together effectively. If there is friction, conflict, dispersion or constraint between the various subsystems, then the subsystems will not be able to perform their functions and will appear to be in disarray.

2.2 Literature Review

At home and abroad, the objectives of training talents in higher education institutions are different due to different regions, schooling purposes and cultures, etc. Moreover, due to the economic development and the level of information technology, each country has formed its own unique and independent information technology practice model and management measures, so the level of information technology construction in higher education institutions varies greatly from country to country. As China's vocational education started late, there are few experiences worthy of reference. Therefore, at the place of informatization construction, we should learn more from the informatization construction experiences of European and American countries and gradually form our own characteristics.

2.2.1 Status of domestic research

With the support and guidance of national policies, the informatization construction of China's higher vocational institutions has been in a stage of rapid development and has achieved certain results, providing experience and reference for the informatization construction of other higher vocational institutions in China.In 2014, at the education work conference, Minister Yuan pointed out that the education sector is the primary sector of China's education reform, and that the education governance system should be standardized and the education governance capacity should be enhanced. Although China's higher vocational education work has a long history, it is true that the work on education management is in its infancy and there is no theoretical guidance that can be referred to. It is necessary to set up a sound and perfect management and operation system according to the training objectives of each higher vocational institution. Some scholars have summarised the experience and mode of running higher vocational education in China since the founding of the country, pointing out that China's higher vocational education needs to take innovation as the starting point and establish an independent education system. To ensure the sustainable development of higher vocational institutions, it is necessary to combine industry and academia and build quality as the foundation and core.

In the education management of higher vocational institutions, information technology has been widely used in it, such as student information management

work. In addition, some scholars have pointed out that if vocational education in China is to achieve revolutionary development, it needs to make full use of information technology, such as using multimedia and online teaching, and building a "cloud platform", so as to innovate the teaching mode and teaching methods [3]. However, in the process of information technology construction and practice, we should not borrow the construction mode of other higher education institutions but should study and analyse the feasibility according to our own actual situation and build according to the actual situation. For example, some institutions of higher education have built a campus card platform with the help of computers and have made certain achievements in the informatization of student consumption, but they have not made desirable progress in the management of teaching services. In addition, some institutions of higher education have been resisted by various parties due to the lack of resources and outdated equipment in the construction of information technology. Therefore, higher education institutions should fully understand and research their own conditions, analyze the problems, grasp the actual situation and carry out planning in order to do a good job in information technology construction. Information construction should be done in three aspects, firstly, to strengthen the cultivation of educational concepts, secondly, to create a good information construction environment, and finally, to improve and construct the education management system.

Although China's higher education institutions have achieved remarkable results in the construction of information technology in education management, especially at the level of infrastructure construction. However, compared with ordinary higher education institutions, there are still obvious gaps, as well as the level of education management informatization construction cannot reach the national informatization construction requirements, the construction level and innovation is poor, unable to meet the basic requirements needed for the development of the times. Through theoretical analysis and data integration, it is found that its construction problems are mainly as follows.

Firstly, higher vocational institutions lack a more in-depth understanding of education management informatization. At this stage, there are obvious limitations in the understanding of the connotation of education management informatization development in China's higher vocational institutions, and it is difficult to think about the connotation of informatization construction from a long-term and macroscopic perspective. Higher education institutions think that education management informatization is a simple superposition of management and information technology, thus neglecting the role and function of scientific and modern management ideas and concepts in the construction of informatization. Secondly, the informatization construction of education management lacks systematic planning. Although China's institutions of higher education have established Office Automation (OA) management systems, teaching systems, student

systems and one-card systems, there are still obvious barriers to information communication between different systems, and it is difficult to simplify the procedures and processes for teachers and students to use the systems through a unified system platform, which greatly increases the workload of managers and teachers in institutions of higher education and reduces This has greatly increased the workload of administrators and teachers in higher education institutions and reduced the efficiency of education management.

In addition, the management systems are relatively independent, with different versions of the same data, and it is difficult to share and synchronise the data of different versions in real time, which makes it increasingly difficult to maintain and integrate the data.

Finally, the construction of education management informatization lacks the concept of collaborative innovation. Education management informatization has a facilitating and promoting effect on improving the governance ability of higher education and the quality of vocational teaching. However, there is an obvious problem of collaborative cooperation in the construction of information technology in China's higher vocational colleges and universities, which makes it difficult to closely link up with enterprises, government and social organizations, and the power and integration ability of resource integration is poor.

At present, the construction mode of information system includes the purchase of information products, i.e. the institution leads the development, the purchase of outsourcing system, and the information system is partially customized or less customized. Because higher education institutions are familiar with business but lack of technology, and enterprises are good at technology but not familiar enough with business, in order to improve the quality of system development, it is necessary to strengthen university-enterprise cooperation and fully integrate the advantageous resources of higher education institutions and enterprises. However, the absence of the concept of collaborative cooperation has led to difficulties in the effective and widespread application and implementation of excellent teaching resources, information equipment and implementation solutions.

2.2.2 Status of foreign research

The positioning and characteristics of foreign higher vocational institutions are somewhat different from those of China, but their experience, theories and concepts about education management are worthy of study and reference in China. The higher vocational education in Britain focuses on the level of employment training, and it is very specific and scientific and reasonable in terms of capital investment, school registration management and vocational certificate management. In addition, some scholars have studied the German vocational education model, introduced the German vocational education model and elaborated on the training objectives of vocational education. The German information technology teaching

objectives are not only focused on university students, but also popularized in primary and secondary schools, and set the goal of making all schools achieve free Internet access, after which they compared the differences with China's vocational education, from which they pointed out how China's vocational education can be improved. The study also compared the differences with China's vocational education and pointed out how vocational education in China can be improved, but more importantly, how to optimise the model of vocational education by taking into account the actual situation of our institutions and learning from the German experience[5]. In addition, comparing the model and philosophy of vocational education in the United States, it is found that there are advantages and shortcomings in vocational education in China, and it is necessary to improve and optimise the education management mechanism in order to make vocational education develop better. The United States first put forward the concept of information technology construction and divided it into four stages for implementation, so that teachers and learning can be proficient in information technology, have information technology literacy and change the teaching mode. In Japan, the management model of vocational education is more diversified and market-oriented. In the 1890s, it put forward the plan of information-based education and formulated corresponding strategies: campus network, information-based education, IT courses, book informatization, etc.

At the same time, a great deal of investment, promotion and guarantee work has been carried out abroad for the informatisation of education and vocational education. Foreign academics also attach great importance to the study of information technology in education, but based on the overall level of analysis, the research on information technology in education management is relatively small up to now, even so it has a strong inspirational effect on the promotion of information technology in education management.

By summarising the literature on information technology in higher education management, it is easy to find that, compared with the research on education management in undergraduate institutions, there are relatively few research results on education management in higher education institutions. Overseas research on vocational education informatization started earlier and covers more aspects; the research focuses on empirical evidence and is a study of applying theory to practice. On the basis of the excellent experience of foreign countries, we have slowly worked out the mode of education management in China's higher vocational colleges and universities, and we have achieved rich results on the influence and application of information technology in education teaching. The research system is not complete; furthermore, there is a lack of mature theoretical guidance, and the practicality still needs to be strengthened. This paper starts from the background of micro-information era, guided by scientific management and synergy theory, and based on the five principles of higher vocational education, it studies the problems

and reasons in the construction of teaching management informatization in higher vocational colleges, which has certain operability and the research has certain practical value.

2.2.3 The general situation of education management informatization construction

2.2.3.1 The construction of one-card informatization

China's campus informatization construction time is still short, and with China's support for vocational education in policy, the number of students enrolled in higher vocational institutions and the scale of schooling have also expanded, and with it, the education management work has gradually become heavy, difficult and tasking, and the traditional management mode obviously cannot meet the requirements of the new era, and if innovation is not carried out, it will directly affect the quality of higher vocational institutions. Therefore, the construction of information technology in China's higher education institutions is an urgent task. The Campus One Card is the most common way for universities to carry out information technology construction. By allowing teachers and students in higher education institutions to use the Campus One Card instead of the numerous and cumbersome documents they used to have, it can help them to study and live better in the school. In addition, the Campus One Card can also be used to help connect and help each other between departments and faculties, allowing for a more scientific,

standardised, efficient and secure management of the campus [6]. The Campus One Card has rich functions, such as identification, including access control information, book borrowing information, personal information, etc.; management functions, including attendance management, dormitory management, student management, etc.; consumption functions, including photocopying, supermarket, library, canteen, bathhouse, water room, etc.; financial functions, including scholarships, tuition fees, utility bills, teachers' salaries, etc.; multi-linkage functions, including transfer information, consumption records, etc. .

2.2.3.2 Information construction of personnel management

The key to the teaching quality and talent introduction in higher vocational institutions is the construction of human resources, the core of which is personnel management. It mainly includes incentives, rewards and punishments, deployment and promotion, recruitment and assessment, etc. However, the informationized management of personnel is not only the process of converting manual into computer or "paper" into "electronic", but also the process of organizing and analyzing personnel information with the help of information technology and digitizing the information to The process is not only "paper-based" but also "electronic". For example, information consultation can be made more efficient by freeing the personnel office staff from the task of analysing and identifying reports with the naked eye, classifying and summarising student and teacher information to facilitate subsequent searches and updates, simplifying the process, reducing

calculations and improving office efficiency [7]. The management can use the information technology platform to get hold of information about the teaching staff, to understand the teachers' training information, teacher moral information, behavioural information and teaching information, and to manage them humanely according to their characteristics. In addition, specific information such as staff changes, title reviews, job changes and personnel appointments are made public to ensure fairness and impartiality and to make the work transparent.

2.2.3.3 Information construction of academic affairs management

Academic affairs management has always been the most complicated, tedious and time-consuming management in higher education institutions. Integrating information technology in academic affairs management can handle information and data more quickly, share and integrate teaching resources, reduce duplication of work and improve efficiency. Firstly, informatisation of teaching administration can reduce the cost of higher education institutions and avoid unnecessary financial expenditure. For example, a sharing platform can be built to realise resource sharing and reduce waste of resources. It can also improve the utilization rate of resources, for example, high-quality courses, micro-courses, competition videos, excellent works and excellent papers, which can be used by teachers and students for learning, downloading and answering questions [8]. Afterwards, it also helps to optimise the management system, improve the capacity of managers and enhance the communication and interaction between faculties

and academic affairs offices. It can be foreseen that in the near future, with the improvement of the informationization platform of academic affairs management, the teaching resources of higher education institutions can be more fully utilized, reducing costs and improving efficiency, thus promoting the rapid development of higher education in China.

2.2.3.4 Construction of informatization of academic staff management

The student population of higher vocational institutions is complex, so compared with ordinary higher education institutions, student management in higher vocational institutions is more complicated, so it is more important to help student management with information technology. Compared with traditional management methods, the informatization platform has more confidentiality, high efficiency and low cost, for example, in the comprehensive assessment of students, party and league, social practice, rewards and punishments, examination results, registration of students, etc. In addition, the information management platform can also be competent in flat management, party building, daily affairs management, fund management, information management, etc. Teachers or counsellors can also use the information management platform to review students' applications for hardship, document replacement, leave of absence and other procedures[9]. Students can check their grades, evaluate their teaching online and select courses through the information technology platform. In addition, students can use the platform to make information on party membership, loans, subsidies, merit awards, etc. open

and transparent. The management style of the information technology platform for students is more efficient and modern, opening up a new way of student management, making students feel humanized and contributing to scientific and formal management.

2.2.3.5 Teaching management informatization construction

The teaching management of higher vocational institutions needs to be standardized, scientific and refined, which is the key guarantee for higher vocational institutions to achieve the goal of cultivating talents. In the new era, the economy is developing rapidly and the society has higher requirements and greater demands for talents. Therefore, in order to meet the demands of the society, higher vocational colleges and universities need to further improve in terms of institutional resources, school-enterprise cooperation, employment and policies, etc., and the realization of teaching management is the key to achieve the cultivation of talents. Information technology can play a role in internship training, course evaluation, online courses, flipped classrooms, teaching planning and learning research, making teaching management clearer, easier and more efficient[10].

In addition, information technology can likewise be applied to teaching platforms to help teachers and students communicate, learn and discuss, thus creating a learning environment and increasing interest in learning. In short, thanks to the construction of the information technology platform, teaching management has made great progress in quality monitoring, teaching management and student

information management, which has led to a revolution in teaching management.

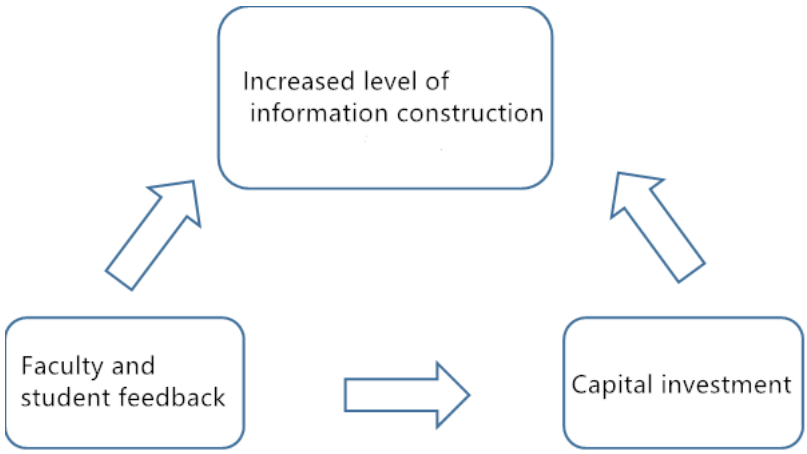

Figure 1.1: The conceptual framework of this study

Chapter 3

Research Methodology

3.1 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.

3.1.1 Design of the survey questionnaire

The respondents were divided into freshmen and sophomore students; full-time teachers, divided into teachers of professional courses and teachers of public courses; and teaching managers, divided into teaching managers of the college and teaching managers of the school. The survey was conducted before and after the construction of the school's education management information technology to investigate the satisfaction level of teachers and students with the corresponding indicators. The answers to the questions were very satisfied (5 points), satisfied (4 points), average (3 points), dissatisfied (2 points) and very dissatisfied (1 point); or satisfied and dissatisfied were used as options. For freshmen and sophomore students, the survey mainly investigated the paperless leave request system, access control system, library borrowing system, one-card system, financial consumption system, and multi-linkage system; for full-time teachers, the survey

mainly investigated the satisfaction level of personnel management system, including salary system, personnel file management system, paperless reporting system, promotion system, attendance system, and leave request system; for teaching managers, the survey mainly investigated paperless teacher transfer system, intelligent lecture platform, student course selection system, online assessment system and student information management system. The above questions involve students, teachers and administrators at three levels, covering students' daily life and learning as well as teaching management and teaching implementation.

3.2 Population and Sampling Method

The survey was conducted with a random sample of students, teachers and teaching managers, and questionnaires were distributed.

3.3 Data collection

A total of 625 questionnaires were distributed and 601 questionnaires were collected on the spot, with a recovery rate of 96%, of which 592 were valid questionnaires, with an efficiency rate of 95%. 360 of the 592 valid questionnaires were answered by students, accounting for 60.81%, of which 155 were answered by freshmen and 205 by sophomores; 162 questionnaires were answered by teachers, accounting for 27.36%, 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.

3.4 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.

Chapter 4

Results of Data Analysis

4.1 General information of the survey respondents

The analysis of the general information of the respondents is shown in Table 1. Firstly, the analysis of the general information of the students shows that the average age of the freshmen and sophomore students are (18.14±2.19) and (20.11±2.85) years old respectively, which is slightly higher in the average age as the sophomore students are enrolled earlier than the freshmen students, and the difference in age is statistically significant from an overall perspective ($p<0.05$). Further comparison revealed a difference in gender composition between freshmen and sophomores, with 82 male and 73 female freshmen students (52.90% and 47.10% respectively) and 112 male and 93 female sophomores (54.63% and 45.37% respectively); the difference in gender composition between freshmen and sophomores was not statistically significant ($p>0.05$). Secondly, analysis of the general information of the teachers of professional courses and public courses showed that the mean age of the teachers of professional courses and public courses was (36.27±4.54) and (37.12±5.46) years respectively, with no statistically significant difference in age between the two ($P>0.05$). Further comparing the gender composition, it was found that 47.17% (50/106) of the teachers of professional courses were male and 52.83% (56/106) were female; 46.43% (26/56) of the

teachers of public courses were male and 53.57% (20/56) were female; the difference in gender composition was not statistically significant (p>0.05). Comparing the number of years of teaching experience between the two, it was found that the number of years of teaching experience was (8.31±2.61) and (8.86±2.36) for teachers of professional courses and teachers of public courses respectively, and the difference between the two in terms of years of teaching experience was not statistically significant (p>0.05). Finally, comparing the general information of the college managers and school managers, the mean age of the college managers and school managers was (37.21±5.19) and (37.88±5.67) years respectively, with no statistically significant difference in age (p>0.05). Further comparing the gender composition, it was found that 47.06% (24/51) of the college managers were male and 52.94% (27/51) were female teachers; 42.11% (8/19) of the school managers were male and 57.89% (11/19) were female teachers; the difference in gender composition was not statistically significant (p>0.05). Comparing the number of years of academic management between the two, it was found that the number of years of academic management for college managers and school managers were (5.09±1.28) and (6.16±1.92) respectively, and the difference between the two in terms of the number of years of academic management was statistically significant (p<0.05), probably because school academic managers were more demanding and thus had higher years of academic management than colleges.

Table 1 General information on survey respondents n (%) (mean ± standard deviation)

Category		Freshman (n=155)/Professional course teachers (n=106)/College administrators (n=51)	Sophomore (n=205)/public lecturer (n=56)/school administrator (n=19)	X2/t values	P-value
Students	Age (years)	18.14±2.19	20.11±2.85	7.155	0.000
	Gender Male	82（52.90）	112（54.63）	0.106	0.744
	Gender Female	73（47.10）	93（45.37）		
Teachers	Age (years)	36.27±4.54	37.12±5.46	1.055	0.293
	Gender Male	50（47.17）	26（46.43）	0.008	0.928
	Gender Female	56（52.83）	30（53.57）		
	Years of teaching (years)	8.31±2.61	8.86±2.36	1.318	0.190
Academic administrators	Age (years)	37.21±5.19	37.88±5.67	0.468	0.641
	Gender Male	24（47.06）	8（42.11）	0.137	0.711
	Gender Female	27（52.94）	11（57.89）		
	Years of academic administration (years)	5.09±1.28	6.16±1.92	2.696	0.009

4.2 Students' satisfaction with the construction of education management informatization

Analysis of students' satisfaction with the construction of education management information technology is shown in Table 2. analysis of satisfaction with the paperless leave system revealed that the satisfaction scores of the paperless leave system before and after the construction of education management information technology were (3.19±0.45) and (3.42±0.46) respectively, and the

difference was statistically significant before and after the construction ($p<0.05$). Further comparison of students' satisfaction with the access control system revealed that 78.06% (281/360) of students were satisfied with the access control system before the construction and 84.72% (305/360) were satisfied with the access control system after the construction, and the difference in satisfaction with the access control system before and after the construction was statistically significant ($p<0.05$). Comparing the satisfaction with the book lending system, we found that the satisfaction scores of the book lending system before and after the construction of education management information technology were (3.27±0.47) and (3.22±0.56) respectively, and the difference between the book lending system before and after the construction was not statistically significant ($P>0.05$). When comparing the satisfaction with the card system, the satisfaction scores of the card system before and after the construction of education management information technology were found to be (3.08±0.21) and (3.17±0.24) respectively, and the difference between the card system before and after the construction was not statistically significant ($p<0.05$). Later, when comparing the satisfaction of the financial consumption system, it was found that the satisfaction scores of the financial consumption system before and after the construction of education management information technology were (2.75±0.40) and (3.76±0.39) respectively, and the difference was not statistically significant ($p<0.05$) when comparing the financial consumption system before and after the construction. 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).

Table 2 Student satisfaction with information technology in education management n (%) (mean ± standard deviation)

Category		Pre-construction (n=360)	After construction (n=360)	X2/t values	P-value
Paperless Leave of Absence System (sub)		3.19±0.45	3.42±0.46	6.782	0.000
Access Control System	Satisfied	281 (78.06)	305 (84.72)	5.281	0.022
	Dissatisfied	9 (21.94)	55 (15.28)		
Library loan system (points)		3.27±0.47	3.22±0.56	1.298	0.195
One Card System (sub)		3.08±0.21	3.17±0.24	5.355	0.000
Financial consumer regime (sub)		2.75±0.40	3.76±0.39	34.302	0.000
Diversity Linkage System	Satisfied	166 (46.11)	175 (48.61)	0.451	0.502
	Dissatisfied	194 (53.89)	185 (51.39)		

4.3 Teachers' satisfaction with the construction of education management informatization

Analysis of teachers' satisfaction with the construction of education management information technology is shown in Table 3. analysis of satisfaction with the payroll system system revealed that the satisfaction scores of the payroll system system before and after the construction of education management

information technology were (2.93±0.37) and (3.02±0.29) respectively, and the difference in satisfaction with the payroll system system before and after the construction was statistically significant ($p<0.05$) compared to that of the payroll system. Further comparison of teachers' satisfaction with the personnel records management system revealed that 44.44% (72/162) of teachers were satisfied with the personnel records management system before the construction, and 54.94% (89/162) of teachers were satisfied with the personnel records management system after the construction, and the difference in satisfaction with the personnel records management system before and after the construction was not statistically significant ($p>0.05$). When comparing satisfaction with the paperless accounting system, the satisfaction scores of the paperless accounting system before and after the construction were (3.28±0.29) and (3.25±0.36), respectively, and the difference between the paperless accounting system before and after the construction was not statistically significant ($p>0.05$). When comparing the satisfaction with the leave system, the satisfaction scores of the leave system before and after the construction of education management information technology were found to be (3.41±0.38) and (3.72±0.41) respectively, and the difference between the leave system before and after the construction was not statistically significant ($p<0.05$). Afterwards, the satisfaction scores of the attendance system were (3.71±0.45) and (3.86±0.53) before and after the construction of the education management information technology, respectively. Finally, comparing the satisfaction of the promotion system, it was

found that 36.421% (59/162) of the teachers were satisfied with the promotion system before construction and 40.74% (66/162) were satisfied with the promotion system after construction, and the difference in satisfaction with the promotion system before and after construction was not statistically significant (p>0.05).

Table 3 Teachers' satisfaction with information technology in education management n (%) (mean ± standard deviation)

Categories		Pre-construction (n=162)	After construction (n=162)	X2/t values	P-value
Payroll system		2.93±0.37	3.02±0.29	2.437	0.015
Personnel records management system	Satisfaction	72 (44.44)	89 (54.94)	3.568	0.059
	Not satisfied	90 (55.56)	73 (45.06)		
Paperless reporting system (sub)		3.28±0.29	3.25±0.36	0.826	0.409
Leave of Absence System (points)		3.41±0.38	3.72±0.41	7.058	0.000
Attendance system (sub)		3.71±0.45	3.86±0.53	2.746	0.006
Promotion system	Satisfaction	59 (36.42)	66 (40.74)	0.638	0.424
	Not satisfied	103 (63.58)	96 (59.26)		

4.4 Satisfaction of educational administrators with the information technology construction of education management

Analysis of the satisfaction of academic administrators with the construction of education management informatization is shown in Table 4. analysis of the satisfaction of the paperless lecture transfer system revealed that the satisfaction scores of the paperless lecture transfer system before and after the construction of education management informatization were (2.84±0.42) and (3.11±0.35)

respectively, with no statistically significant difference ($p<0.05$) compared to the satisfaction of the paperless lecture transfer system before and after the construction. Further comparing the satisfaction of academic administrators with the intelligent lecture platform, it was found that 40.00% (28/70) of academic administrators were satisfied with the intelligent lecture platform before the construction, and 44.29% (31/70) of teachers were satisfied with the intelligent lecture platform after the construction, and the difference in satisfaction with the intelligent lecture platform before and after the construction was not statistically significant ($P>0.05$). Comparing the satisfaction with the student course selection system, we found that the satisfaction scores of the student course selection system before and after the construction of education management information technology were (3.48±0.55) and (3.55±0.60) respectively, and the difference between the student course selection system before and after the construction was not statistically significant ($p>0.05$). When comparing satisfaction with the online assessment system, it was found that the satisfaction scores of the online assessment system before and after the construction of education management information technology were (3.41±0.38) and (3.72±0.41) respectively, and the difference between the online assessment system before and after the construction was not statistically significant ($p>0.05$). Finally, comparing the satisfaction of the student information management system, it was found that 64.29% (45/70) of the teachers were satisfied with the student information management system before

the construction, and 77.14% (51/70) of the teachers were satisfied with the student information management system after the construction, and the difference in satisfaction with the student information management system before and after the construction was not statistically significant (p>0.05).

Table 4 Teachers' satisfaction with information technology in education management n (%) (mean ± standard deviation)

Categories		Pre-construction (n=70)	After construction (n=70)	X2/t values	P-value
Paperless Class Transfer System		2.84±0.42	3.11±0.35	4.132	0.000
Intelligent delivery platform	Satisfaction	28 (40.00)	31 (44.29)	0.264	0.608
	Not satisfied	42 (60.00)	39 (55.71)		
Student Course Selection System (sub)		3.48±0.55	3.55±0.60	0.720	0.473
Online assessment system (sub)		3.01±0.34	3.02±0.43	0.153	0.879
Student Information Management System	Satisfaction	45 (64.29)	54 (77.14)	2.794	0.095
	Not satisfied	25 (35.71)	16 (22.86)		

4.5 Problems in the construction of information technology

4.5.1 Unbalanced development of information technology construction

Education management informatization construction is not a quick job overnight, it has slow results, large investment characteristics, and is particularly susceptible to the impact of external factors, it is very easy to cause the problem of uneven development. For example, China's uneven economic development, 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 practical application, such as the lack of training system, incentive measures, insufficient construction of intelligent teaching platform, and weak security capability [11]. In addition, not enough attention is paid to the construction of information technology in education management, and they are accustomed to traditional management methods, despise information technology and do not understand its essence and requirements, resulting in insufficient implementation in the following departments, thus causing uneven development.

4.5.2 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 [12]. Unscientific management mechanisms, incomplete educational data, and crude management methods all make information management unable to coordinate and plan comprehensively. Therefore, the construction of information technology in the new era should be set up in the form of multi-architecture and diversity, and the introduction of cutting-edge regulations, strategies and concepts.

4.5.3 Information technology construction measures guarantee system is not sound

At present, the informatization construction process in higher education institutions needs to strengthen the supervisory 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 cannot be 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 [13]. The lack of supervision mechanism makes the information management of higher education institutions ineffective, and causes the funds to be spent while also leading to a reduction in the authority of the school management system, making the implementation of some policies inadequate and

ultimately leading to the information construction being a sham. In the new era, we should make full use of the sword of information technology to reform the teaching management mode, improve the level of school operation, increase the efficiency of the school office and cultivate better talents.

4.5.4 Imbalance between investment in hardware facilities and software platform construction for informatization construction

In the construction of education management informatization in higher vocational institutions, most institutions still focus on investment in hardware facilities, and the construction of software platforms is often in a secondary position. Some higher vocational institutions have a wide range of hardware facilities, multimedia classroom configuration is more perfect, the proportion of hardware investment construction even more than 80%, but the software development is extremely backward. The reason for this is that the hardware equipment is visible and tangible, and the results are immediately obvious, while the software investment is invisible and untouchable, and the results are not significant.

4.5.5 Insufficient innovation in the development of information technology construction

The software platforms related to informatization in higher education institutions are developed by professional software engineering companies, which to a certain extent improves the standardization of management and the efficiency of work accordingly, but they are often detached from the actual situation of the

school, complicated to operate and not suitable for non-informatization professional education managers. Many management systems lack a certain degree of openness and expandability, resulting in instability of the platform system and reduced management effectiveness. Most of the current education management platform systems have been transformed from a C/S (client/server) model to a web-based B/S (browser/server) model. However, with the popularity of smart terminals, especially the rapid development of wireless Internet access on smartphones, a mature and intelligent APP-based education management software platform has yet to be established.

4.5.6 Low utilisation of information technology and resources

Education management informatization is not only manifested in advanced teaching facilities, but more importantly, the utilization of informatization technology and resources should be improved. Educational management informatization has taken shape in most higher education institutions, but often the network application is limited to courses related to information technology, while most teachers do not use information technology in the course of lectures. At the same time, as far as the information technology resource platforms established so far are concerned, on the one hand, there are fewer course resources and the professional coverage is not comprehensive enough. On the other hand, there is insufficient communication between teachers and students on some of the course platforms, so students are unable to give timely feedback on the use of course

resources and teachers are unable to make timely adjustments according to students' usage. Therefore, the low utilization rate of information technology and the inability to effectively optimize the integration of resources restrict the development of universities and make the advantages of information technology in university education cannot be fully reflected.

4.5.7 Lack of management talents for informatization construction

The status of management talents of informatization in higher education institutions is not only "software engineer". For higher education institutions, an excellent information management personnel should have solid information technology and strong management ability, but also be able to use information technology flexibly in teaching work, for the school professional construction, curriculum construction services. Teachers are the ultimate realisers of education, and the level of their use of information technology is closely related to the quality of teaching. Although most teachers in higher education institutions have realized the importance of education informatization, some of them are not proficient enough in mastering new and high technology of informatization, and they do not have a good understanding of the advantages of integration, sharing and exchange of teaching resources brought by education informatization.

4.6 Countermeasures for the construction of education management informatization

4.6.1 Establish a new development concept

Higher vocational institutions should raise their awareness of the importance of education management informatization, clarify the leading role of informatization construction in education reform and education development, optimize education management processes and mechanisms through data-based management concepts and thinking, broaden the scope of education management, so as to better understand and internalize the connotation of informatization construction, and build and innovate education management informatization in higher vocational institutions from two levels: sharing concept and management orientation The foundation for the construction and innovation of education management informatization in higher education institutions is laid from two levels: sharing concept and management orientation. Firstly, the concept of sharing. In the informatization construction of higher education institutions, the Internet assumes the role of connecting schools and teachers and students, resources and people, students and teachers, teaching and learning, and optimizing the teaching and management process. It is necessary for higher education institutions to take the sharing concept as a grip to give full play to the integration of information technology with education, people and resources, so that information innovation and data innovation can be realized in the integration of technology. For example,

with the support of the sharing concept, teachers are able to construct a teaching environment with up and down integration and high student participation, so that information technology can break the restrictions of regions, schools, fields and national domains in the integration and sharing, forming a new pattern of resource co-construction and resource sharing. Secondly, a user-oriented management orientation. Higher education institutions should establish the development concept of taking business processes as the grip and integrating services and hardware and software into one, so as to build out an integrated platform that is student-oriented, task-simplified and accepted by teachers and students, and thus realise the change of the traditional education management system.

4.6.2 Active top-level design for information technology construction

Top-level design has the basic characteristics of scientific, strategic and long-term, which can ensure that project goals and management objectives can be achieved quickly. First of all, higher education institutions should formulate scientific strategic planning, build a centralised and scientifically decentralised investment mechanism, and optimise the fund allocation process; build a scientific assessment system and governance structure from user participation and governance structure, improve the decision-making mechanism, and innovate the governance mode through the user-oriented development concept, so that education governance presents the characteristics of democratisation, flexibility and joint participation of multiple subjects. However, under the trend of smart campus construction and

intelligent development, higher education institutions need to carefully plan and design all elements, levels and aspects of education management informatization construction, clearly promote the direction of education management informatization construction by improving the assessment system, structural reorganization, benefit division and resource allocation, and solve the problems of obstructed information sharing among secondary institutions and functional departments, duplicated system construction and data "silos" and other problems. Secondly, higher education institutions should clarify the objectives of informatization construction and development, and ensure the effective connection of data maintenance, use, management and collection, so that the informatization construction system is reasonable, the objectives are clearly positioned, and the functional departments have their own duties.

4.6.3 Synergistic development of education management and informatization construction

At the macro level, the leadership of higher education institutions usually plays an important guiding role at the macro level, such as standard setting, system establishment and top-level design, and is able to make clear the development goals of informatization construction by formulating regulations that meet the requirements of relevant government departments in China, to effectively prevent and solve various problems in the institutions, and to enhance the effectiveness and efficiency of informatization construction with the help of school-enterprise

cooperation mode. At the same time, the education management personnel of higher education institutions should realise that education management informatization construction is a whole, each module and system maintains a certain degree of independence while there is still some connection, for example, in the guarantee mechanism, management institutions, quality control, infrastructure, faculty, security, etc. in the independent operation of the total system can also have an impact on the total system, making the sharing of resources and information, in addition, in the operation of the total system In addition, while the total system is running, it also has an impact on the sub-systems and is optimized, making the information management develop and operate in an orderly manner and making the education management scientific and precise.

At the same time, the current epidemic prevention and control work has become normalized, and some higher education institutions have recognized the importance of education informatization construction and have increased their investment in various types of software and hardware equipment. All higher education institutions should combine the current actual needs in terms of education management within the campus, make scientific design of the information management system, organically combine the content of education courses with information technology, further develop an information platform that integrates management and teaching that meets the current requirements of education management in higher education institutions, so that a variety of traditional school

functions such as enrollment, assessment, course selection and teaching can be organically integrated with information technology to form a complete The platform enables students to complete a one-stop teaching experience in higher education institutions. At the same time, teachers can also share teaching resources for students through the platform, so that students' learning activities can break the restrictions of time and space, and truly be able to learn knowledge and skills anytime and anywhere, further improving vocational skills and professionalism. In recent years, the scale of education in higher education institutions has gradually expanded and the number of students has gradually increased. The aim of higher vocational institutions is to provide technical talents for society, which also determines that higher vocational institutions pay more attention to students' practical teaching in the education process. The classroom content is relatively boring, mostly based on theoretical teaching, and practical teaching takes up less class time. The education curriculum should be optimized and the proportion of practical teaching should be increased to stimulate students' enthusiasm for learning.

4.6.4 Strengthen the construction of informatization talents

Higher vocational colleges should establish informatization technology training bases under the guidance of national policies, conduct ability 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, so as to ensure that the informatization construction of higher vocational colleges can develop smoothly. School-based training, research regions and teachers' elective learning can be chosen to establish a team of informatization talents, so as to integrate informatization into the core of teaching management content [14]. Teaching is an important part of higher education management, and systems such as learning communities, training systems and teaching and training can be established to innovate and reform teaching models with the help of information technology, and to build an excellent team of information-based teachers. Higher education institutions should actively increase financial and policy support, pairing old and new teachers, building teaching teams, promoting the introduction of outstanding talents, and improving the introduction system to improve the informatization level of the teaching team.

In the context of accelerating globalisation and increasingly fierce competition, information technology is gradually becoming an important part of core competitiveness. In the current context, educators and managers of higher education institutions should set an example by constantly learning modern educational ideas and concepts, and apply them in the teaching process, enriching classroom content with cutting-edge theories and practices, using colourful classroom content to enhance students' enthusiasm and initiative in learning, enlivening the classroom atmosphere, enhancing students' enthusiasm for learning and improving the teaching effect. At the same time, teachers in higher education

institutions should also master certain educational management strategies, change their teaching philosophy and teaching mode, optimise the setting of various majors and subjects, closely integrate with the current vocational skills needs, and master information technology and various teaching information management systems. In addition, teachers in higher education institutions should continue to improve their overall quality and professionalism, and teachers need to keep up with the times and not stick to their old lesson preparation notes. Give full play to their important role in promoting the construction of information technology for the management of adult continuing education in higher education institutions.

4.6.5 Establishing school-based informatization resources and platforms

According to the type and characteristics of higher education institutions, they should analyse the strengths and weaknesses of teachers' research team according to the construction of information technology and establish corresponding teaching resource banks, highlighting the role of online teaching platforms in assisting classroom teaching and extra-curricular self-learning, and at the same time pay attention to the cultivation of students' vocational skills and professional knowledge and theories, so as to adapt the teaching resource bank to the development of students' cultivation work. Compared to ordinary higher education institutions, the informatization of China's higher education institutions is obviously inadequate, and there is a lack of experience in the construction of resource banks. Therefore, we should not be ashamed to learn from the achievements and experiences of

domestic and foreign countries in the development of software development and the construction of resource banks, and carry out the informatization of education management. On this basis, new technologies should be used to develop an integrated resource base through planning and integration to interconnect schools and help coordinate work.

The optimised and integrated education management platform can not only meet the online interactive teaching of teachers and students, but also meet the needs of non-academic education management informatisation in higher education institutions. The current education management platform of higher education institutions has functions that can meet all the business that students need to handle throughout their academic cycle from enrolment to graduation, effectively enhancing the internal management efficiency of higher education institutions. Continuing education for adults is the main education business of most higher education institutions, and it is also a more complicated work content in higher education institutions. Therefore, the construction of education platform letter in higher education institutions has become an important part of the current process of promoting education informatization in higher education institutions.

4.6.6 Establish an organizational guarantee system for education management informatization

Firstly, we should establish the management concept of efficiency and quality as the centre, conform to the development of the times, create a

harmonious and orderly informatization construction environment, improve the connotation of the school, establish a management system of higher vocational colleges and universities that matches the development of society, and effectively improve the quality of vocational education. Secondly, we should avoid the lack of resources in the process of informatization construction, strive for an even distribution of resources in organizational departments such as academic staff, logistics, teaching, academic affairs and personnel, and strive to share resources, coordinate work and improve operational efficiency. To improve the supervision mechanism of information technology construction, to ensure the quality of information technology construction. School research construction supervision department, training supervisors, so that they understand the work authority, methods, content of educational management information technology construction, skilled in the review and approval, technical maintenance, construction content and other links involving information technology construction. In addition, it is also necessary to make full use of information technology in the process of information technology management in higher education institutions to guarantee fair distribution of resources and ensure open and transparent information. In short, higher education institutions should have a correct understanding of information technology construction in education management, make changes in technology, and make corresponding reforms in management concepts, methods, theories, organizations, ideas and systems.

4.6.7 Increase capital investment in informatization construction

As a construction work with a large workload and a long period of time, education management informatization in higher education institutions must be guaranteed with sufficient funds to ensure that the construction work is carried out smoothly so as to achieve the expected results. The national financial institutions and local financial institutions should increase the investment in the informatization construction of teaching and make full use of the desire to speed up the construction of education informatization in colleges and universities. Only with the high attention of the government and educational institutions, the source of funds for the construction of informatization of education management in higher education institutions can be effectively guaranteed, so that the function of serving the economy and society in higher education can be better played.

At the same time, with the gradual completion of the construction of hardware facilities, the construction of information management **platform becomes more urgent. It is necessary to develop and build an intelligent and modular information platform that can dovetail education management and teaching implementation flexibly and seamlessly connect PC terminals and mobile phone terminals, so that it can become a multi-functional informationized resource management data centre in higher education institutions that runs through the whole process of education and teaching, with full participation of teachers and students, and has teaching, learning, management, records,**

enquiries, statistics and analysis as one.

4.6.8 Fully exploit informatization to analyze teaching data

[1] In the process of education informatization construction, attention should be paid to the massive amount of front-line teaching work data and students' online independent learning data for full excavation, and the information and intelligence obtained should be used as a scientific basis for education management decisions. For example, schools can retrieve the log-in information of teachers and students of high-quality courses over a period of time, analyse and judge the teaching and learning situation, understand the use of resources, and then take corresponding measures to analyse the causes and improve the use of resources. The "big data" accumulated by the server can be fully exploited to match the best decision for individual learning, teaching arrangements and even educational supervision and analysis.

Chapter 5

Conclusion and Discussion

5.1 Summary of research findings

Through conducting surveys among teachers and students and reviewing relevant literature, higher vocational institutions have made some achievements in the informatization construction of education management, such as the informatization construction of personnel management, the informatization construction of academic affairs management, the informatization construction of academic staff management and the informatization construction of teaching management, which makes education management more standardized and scientific, and the efficiency of work is obviously improved. In addition, there may be problems of unbalanced development of informatization construction, inadequate management mechanism and unsound system of guaranteed measures in the process of informatization construction of education 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 implementing the collaborative development of educational management and informatization construction, strengthening the construction of informatization talents, establishing a school-based informatization resource base and platform, and establishing an organizational guaranteed system for educational management informatization let

both teachers and students enjoy the convenient learning and office in informatization.

5.2 Discussion

Through this thesis writing, through actual interviews and research, we got rid of the theoretical knowledge and paid more attention to practice, improved the ability to consult literature, synthesized the knowledge, exercised the ability to solve problems and had 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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