On the Construction of Management Pattern of Informationization in Colleges and Universities

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Abstract. Educational informationization is an important means and core impetus to realize the modernization of education, and constantly strengthen and improve the construction of informatization is the key to the strategy development of information technology in colleges and universities. This paper briefly discusses the problems existing in the informatization construction and management in university, and then using the experience of informationization management of universities in the United States and other developed countries, introducing the CIO pattern. Finally, it puts forward suggestions and thoughts on the informationization management of colleges and universities.

Introduction

General Secretary Xi Jinping at the Second World Internet Conference pointed out that "the Internet as the representative of the ever-changing information technology, leading the new changes in social production, creating a new space for human life, expanding the new areas of national governance, greatly enhance the human understanding The world, the ability to transform the world. "[1] . At the same time Information technology plays an increasingly important supporting role in the teaching, research and management of higher education institutions, and the great changes of information technology have put forward new and higher requirements for the development of colleges and universities. So we need to keep up, and actively explore new ideas and new concept of information management system of colleges and universities.

Problems in the Construction and Management of Informatization in Colleges and Universities

After more than ten years of development, the construction of informatization infrastructure has made great progress and gratifying achievements in colleges and universities. The informatization environment and conditions have been greatly improved. Most colleges and universities has been the construction of advanced computer and server hardware facilities and related application systems, campus network has been realizing a complete coverage of the cable, the rapid development of informationization of colleges and universities have built their own campus wireless network, etc. However, education informatization of teaching, scientific research and management support effect is not apparent. After all, it is the contradiction between the improvement of information infrastructure and the backward information management mechanism. The main problems are as follows:

The degree of emphasis on informationization is not enough

In the development of colleges and universities, we have not fully realized the importance of strengthening the construction and management of information, from the status of information department in the management of colleges and universities can be seen. In the information management of colleges and universities in our country, some colleges and universities have set up the leading departments of informationization, such as network information center, network information office, etc. Some colleges and universities have only set up information section and are
anchored to other departments. Even the establishment of the information department, it is divided into schools directly under the unit or service unit, its function is to serve the school's teaching, research, etc. Compared with other departments such as school Principal's office, personnel department, science and Technology Department, its management function is greatly weakened. This positioning makes the information management work is usually placed in the auxiliary, from the property, service status, only the right to execute without decision-making power, not to mention the level of leadership in the school level.

**Information department functions are limited**

Some universities set up such as network information center, network information office informatization leading designing department, the advancement of informatization mainly by the department leader. Subject to the authority and service function, make it impossible to upgrade the school information management work to a strategic height to overall planning, comprehensive advancement. Part of the university set up a leading group of information, by a vice principal to serve as the leading group of information technology leader. However, the vice principal need to deal with a lot of things every day, Part of the vice principal does not have information and other related background knowledge, this is bound to affect the development of information technology.

**The lack of unified planning and coordination of information technology development, the school departments are fragmented**

In the information construction of colleges and universities, because of the lack of unified planning, most of the construction of information system is based on the demand of the department to implement. There is little overall consideration and global perspective planning. The various departments lack of coordination, which causes the difficulty in data sharing between different systems, information isolated island phenomenon is serious. At the same time the information sector in the school's service-oriented status, but also determines its progress in the information technology to promote the weak, slow to promote, etc.

**CIO Pattern**

The United States and other information technology developed countries, after several decades or even longer development, the level of its university information reached an unprecedented height. It not only has a sound education informatization environment, but also has a sound education informatization policy system and management system. According to data shows, at present our country's informatization development level lags behind foreign universities in developed countries at least 10 years [2]. At present, American universities have established CIO mechanism, which can effectively promote the development of informationization strategy and the effective integration of IT resources.

CIO (Chief Information Officer) is generally known as the chief information officer, the chief information officer is a new type of information managers, CIO as a catalyst for enterprise informationization. CIO Magazine defines CIO as CIO, a senior official in charge of a company's information technology and systems, they are guided by the use of information technology to support the company's goals, and they have both technical and business process knowledge. They are the best candidate who can be the organization's technology deployment strategy with the business strategy together closely [3].

**The Main Duties of CIO in Colleges and Universities**

**The CIO participation in school decision making, formulates plans for the development of university informatization**

At present we are in the "thirteen five" development opportunities. Is the career development of the school full access to the key stage of the "new normal"? The CIO pattern of colleges and universities has the great need to promote the development of scientific research, social application,
management and so on through the informatization to serve the country's social economy, culture and education development. Therefore, the university CIO should combine the school's characteristics, according to local conditions, according to the school information development status and the actual situation, CIO should provide scientific and feasible informatization plan for university development. Pointing out the direction of the development of informatization in colleges and universities.

CIO full in charge of school informatization construction work

University of CIO as information promoters and transformers should be fully responsible for the school informatization construction work, including the construction of campus network infrastructure, the formulation of relevant standards and codes, promoting the construction of information system in colleges and universities and the integration of information resources utilization, to foster the qualified personnel of informatization. Constantly improve the level of information service and quality, promote the rapid advance of the development and reform of colleges and universities.

Cio co-ordinate the various departments of the school to ensure the smooth progress of the work

Informatization construction is a systematic project, will not happen overnight and also the construction of informatization is a complicated project, information-based project in the construction and implementation process, involving many functional departments, need cooperation between different departments. CIO should have strong management and decision-making rights, break the barriers between departments, co-ordinate the coordination of various functional departments to ensure that information construction work to maintain a strong execution and driving force.

Suggestions and Thoughts on the System Construction of CIO in Colleges and Universities

Introduced the CIO mechanism, perfect the decision-making structure of informatization

Draw lessons from the successful experience of informatization construction of colleges and universities in the United States, according to China's national conditions and the actual situation of universities information construction, set up leading group for information technology in university, The group is the highest decision-making body of university information, and promote the construction of informatization in colleges and universities. The team set up a team leader, the university vice principal as CIO, The vice principal should understand this school informatization development present situation, Can accurately grasp the opportunities and challenges of the development of information technology in colleges and universities, should have a keen insight and overall vision of informatization development. With a high global coordination, communication, management and so on, informatization leading group members are dominated by information department leader, head of the personnel department leader, Principal's office leader and so on.

In order to ensure the scientific nature of information decision-making, an expert committee on information technology should be set up to provide advice and suggestion for the informatization leading group [4].

Strengthen the informatization department functions, promoting the construction of informatization management system

In the process of informatization construction in colleges and universities, the network information center, information office and other information-oriented departments, as the core of the implementation of information technology departments should be given to the information industry leading administrative functions, improve the status of information technology leading departments. To ensure that the school information construction work in an orderly manner to ensure that information technology has always maintained a strong execution and driving force.
Implement step by step, steadily push forward the informationization process

University introduction of CIO mechanism will be a new university reform and innovation, but also a new change and development. Introducing the CIO mechanism is not only a simple one agency, is a major change in management concept, management functions, etc. Informatization construction is a systematic project will not happen overnight, therefore in the process of informatization construction, each department should work together, close cooperation, and steadily push forward the informationization process.

Conclusion

Informatization construction of colleges and universities a long way to go, the introduction of the CIO mechanism, promote the informatization system and mechanism innovation in colleges and universities, the CIO at the same time as the leader of the informationization in university, need not only has the rich information of background knowledge reserves, more information perspective and the ability to control the complicated situation and controlled, to coordinate, informatization construction work, believe that the future of the information construction of colleges and universities will be more beautiful.

References