### Discussion and Research on the Construction of Archive Informatization at Secondary Schools in the University

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### **Abstract**

The construction of archive informatization is an urgent task of archive management in our country at present, it is also a main job content in the university. This paper expounds the necessity for the construction of archive informatization in a university. It analyzed the influencing factors for the construction of archive informatization at the same time. It proposed the specific implementation countermeasures for the construction of archive informatization in the university.

### Keywords

Archive in the University, Informatization, Influencing Factor, Countermeasure.

#### 1. Introduction

The construction of archive informatization in the university is an important work which utilizes resource construction as the core, paper file digitization as the keynote, construction of computer net as the foundation, and expansion of exploiting the resources for archive information as the target. The level of informatization is an important sign to measure the modernization degree of file management in the university. Therefore, Speeding up the progress of file informatization and expanding the service functions of archives at secondary school have become the necessary choices and active demands of archivists in the university. The authors analyzed the influencing factors of archive informatization in the university and proposed the specific implementation countermeasures by combining the real situations of archive informatization in the university and our work experiences.

### 2. The necessity of construction of archive informatization in the university

The construction of archive informatization is the demand of social development. Along with the advancement of society, development of technology, increasing speed progress of office automation, the construction of archive informatization in the university has become into a new historical stage. The traditional manual operation, mode of re-organization, storage of paper archive, manual retrieval and query will replaced by modernized management mode step by step. Informatization has been permeated into teaching, research, management and other aspects. Archive informatiation is already an inevitable trend of developing the archive work in the university.

### 2.1 To expand the service scope of archive work

Archive informatization will provide necessary, reliable and massive fundamental public information. It can meet people's demands of shared information, provide the fundamental conditions of exploitation for social public information and support the information socialization. Using the way of modern management to store all kinds of information can be more convenient to develop and utilize, it can also make more extensive social profit. It can expand the service scope pf archive work greatly.

### 2.2 To improve the work efficiency of archive management greatly

In the environment of informatization, paper documents and electronic documents archived must be implemented efficiently and orderly under new mode of management. The part-time archivists at all of departments in the university receive and deliver documents via net, they also need to enter and upload the implemented documents into the software of archive management. The archivists check and accept the data saved in the system, archive automatically to generate the electronic archive and

paper archive by using the system of archive management. It can be reduced the workload of entering, shortened the period of archive generated and utilized, improved work efficiency.

### 2.3 To be in conformity with the system of office automation in the university

Along with the development of constructing modern information technology and digitization campus, the campus nets were established generally in the universities. The system of archive management can be in conformity with the system of office automation in the university via net. It can receive the more normative information of electronic documents which are generated directly in the office automation timely, the data will become digital archive directly. Archives should manage the digital archive efficiently and optimize the resource of archive information.

# 3. The influencing factors for the construction of archive informatization in the university

The construction of archive informatization needs combined action and supporting each other of the various factors. It contains technical factor and nontechnical factor. Here, the technical factor can be understood as "hard environment" and nontechnical factor can be understood as "soft environment". For there are not enough "hard environment" and strong technical support, it can cause that the depth of developing archive information resource is not enough and efficient management, net service, sharing resource of the information are not ideal. For there not enough "soft environment", fund, talent, feasibility study and constraint without unified system standard, it would affect the progress of informatization.

#### 3.1 Technical factor(hard environment)

Construction of resource cannot leave information technology. The resource of digital archive information is the ultimate fountain of archive informatization. Establishing resource is generally divided into text message of digital archive, catalogue of archive, compiling and researching information. Text message can be generated directly in the computer system. It will become electronic document or digital archive by demanding, scanning and converting data to save existing paper document, picture, video and image into the medium of CD, disk etc.

Managing information cannot leave information technology. The resource of archive information is saved into the computer system in electronic form. It realized digitization of information resource. It should be managed normatively by using information technology. The content of managing electronic document covers a wide range. It is not only to collect and save but also to put down in writing, count,process,appraise and implement. The maintenance of procedure must contain storage, data backup,carrier conversion, migrating, accessing and security controlling. In the situation of the difficulty for compatible new and old technology under developing continuously information technology, the risk of distortion, loss, nonrecognition after saving the digital information is very big. Implementing the management of information net not only can enter the original archive content into the computer system,but also can recombine the archive via computer technology to retrieve by user, transfer, analyze and implement conveniently. It must set up security system and take crypto-security to protect archive efficiently during the procedure of entrance, transmission and using.

Information service cannot leave information technology. The service of resource is to provide the archive information resource to the user through a certain way. Except traditional borrowing and copying, the net service can better exert the initiative of archive information service. It contains several kinds of service of providing archive catalogue retrieval, browsing original text of archive, online exhibition, releasing the information of edition and studying. The archives can release all the open archives via the net, or can exhibit the archive information as the media of text, image and audio. It should point out especially that realizing efficient and convenient retrieval of information in the net environment is the ultimate goal of the information service. Nowadays information technology updates very fastly, the way of retrieval should break through since backward retrieval tools could affect the timeliness of information. The whole procedure from generating electronic document and paper archive informatization to net retrieval of archive information apply information

technology as the premise. The application of information technology is the starting point of archive informatization and a full range of manging archive information. It covers the whole procedure of generating archive, permanent saving, effective utilizing or destroying Especially, the system of archive management has very strong ability of data processing, it can better reflect the function of information technology in development and utilizing.

## 4. The plan, objective and implementation countermeasure of construction of archive informatization in the university

Combining the influencing factors of archive information construction, it is proposed the following construction plan, construction objective and specific implementation countermeasure. Construction plan: According to the principle of demand orientation, it is to investigate existing resource of archive, understand real demand of the business departments, seek the support of policy, fund, human resource and other aspects from the competent department in university. From technology application and system design to communication with other archive departments by using archive demands in time, it is to exchange of experience, learn a lesson, look for the support of idea, institution, method and means, solve the faced problem, and lay down the mode for the construction of archive informatization. That is to push on the infrastructure of archive informaization actively, construct the resource of archive information and manage the archive, and build the application system. The objective of construction: Dongquan Yang who is the chairman of National Archive Bureau proposed in the Zoos annual meeting of national archivists:" Carrying out people-oriented principle, Construct two systems." This policy of archive work is to build the system of archive information resource for covering the people and build the the system f31 of archive utilization for people's convenience. Hereby, it can be determined the construction objective of archive informatization in the University:efficient integrating the archive information resource of the University, implementing digitization of the archive information, management normalization of the archive information, service networking of the archive information, meeting the demand of archive user in the campus and off.

### 4.1 Building the system of archive information resource in the university

Digital construction of archive information resource. First, it is to focus on collecting and processing the valuable archive information of this university, it is to determine the information resource and receive the preassigned information resource from the various departments regularly ever year by analyzing and investigating (including traditional documents and digital documents). Especially, the archives should supervise and urge the secondary units of in the university to form the system of collecting information and not leave nothing in any corner. Every department collects and archives the valuable materials of archive information generated in each work in time, sums up the archive resource of human resource, party, administration, teaching, research and infrastructure to ensure the archive stored in the archives complete, adequate, efficient and quality. Second, it is to integrate the archive resource of comprehensive class, human resource class and student class. Third, strengthening the management and archiving of electronic documents can realize the real receiving, management and utilization of electronic documents under the net environment. Fourth, using the technology of digit-analog integration can digitize all kinds of archives stored in the archives, enter the paper archive information into computer, access the management information system of archive, save the existing archive materials, old materials stored in the archives into the computers and store them into the management information system of archive by using scan technology.

Construction of archive information resource database. Using existing electronic documents to build the database of archive: At first, it is to enhance the construction of document catalog database, then it is to construct the important archive digitization, build high quality and high level database of full-text information. Thus, integrating the data saved in archives can provide the user a clear cognition and an overall understanding. Especially for constructing a characteristic database:

According to the development direction of each work in the university, it is to set up the database by using the advanced database management system, set up the relevant database in every link, so that it is easy to access, retrieve, browse and process the information, it is also easy to communicate the information and enhance service quality. For example, setting up the database of student's shool-rolls, and collecting student's record at school can distinguish true or fake diploma of graduation and degree. It can seek job for the graduates, provide real evidence for graduate entrance exam, studying abroad and certificate of grade. It is easy to track information of graduates, set up the database of teacher's achievement data, overall and historically record the situation of a teacher since he or she started the job in teaching, technical position, scientific research achievements, awards and administrative position. It can objectively and synthetically reflects the ability and level of a teacher, it can also be the basis for fostering the teacher. Setting up the database of scientific research achievements can understand the trends of scientific research in the university and create more chances for promoting, transforming the scientific research achievements to enhance service quality. Construction of archive information net. Constructing an archive information net which covers whole campus by using archive as the center can be the window for receiving and releasing the information. 1. Based on the original digitized information and with the help of campus net, it is to collect information resource which has the value of archive and is related to teaching and scientific research, at the same time it is in conformity with office automation, it is also to receive the more normative electronic document information directly generated in the procedure of office automation. 2. After appraising, it is to transform the information with the value of saving into archive resource stored in the archives. Using modern information technology refines, processes and develops in deep level the information which can be open, with the help of campus net and data transformation by using archive management information system, it is generate more products of information service after reorganization to enrich the collections.

### **4.2** Construction of the system for managing and utilizing the archive information in the university

Establishing the unified management platform

Establishing the service system of archive information socialization

Establishing the sharing system of archive information resource

- 4.3 Construction of talent team system for archive informatization in the university
- 4.4 Construction of security system for archive informatization in the university

### 5. Conclusion

The archive informatization in university is a systems engineering and an important part of digital campus. The final objective of it is to realize archive information digitization, archive information management normalization, and archive information service networking. It is also to realize information sharing, thereby it can improve the utilization rate of archive information resource. The task has chronicity, arduousness, and complexity. It is also affected by technical factors and non-technical factors. The university ensures the policy and standard in advance, enhances the investment of archive infrastructure, trains the specialization talent of archive, does the good job of security assurance, makes the construction of archive information resource and construction of archive information resource management and utilization system better, thus it can realize the objective of archive informatization step by step. At the same time, the archive informatization in university and the construction of society informatization and the construction of electronic government have the consistency. The university should follow the law of self-development, and promote the progress of archive informatization practically, step by step, actively, safely.

### **Acknowledgments**

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