

# Practice and Thinking on the Information Construction of Graduate Training

Lingyu Yan

University of Geosciences (Beijing), No. 29 Xueyuan Road, Haidian District, Beijing 100083, China

**Abstract:** With the continuous deepening of postgraduate education reform, traditional teaching management methods can no longer meet the needs of postgraduate, and it is imperative to realize the information management of postgraduate education. Information construction has now become an important part of the development and talent training of universities, and it is a basic and long-term work in the field of higher education. By establishing a training system based on a network platform, it is conducive to further standardize and optimize the management of graduate training, strengthen the monitoring of the training process, and promote graduate education innovation. This article will analyze the structure and function of the information construction of graduate education management in our country, discussing the related problems and countermeasures in the process of system implementation in order to provide a useful reference for the information construction of graduate education management in universities.

**Key words:** Graduate students; Training management; Informatization

**Publication date:** December, 2020

**Publication online:** 31 December, 2020

**\*Corresponding author:** Lingyu Yan, 610536975@qq.com

The reform of postgraduate teaching continues to deepen, and the construction of an information-based teaching management system is an important part of the teaching management of postgraduates in universities. Informatization is the living environment for university teaching, scientific research and management activities. The team of graduate students in colleges and universities continues to grow, and the

management work becomes more complicated. It is more urgent to build a complete and efficient network management system. This article mainly analyzes the structure and kinetic energy of postgraduate training information management system, analyzes the current information system related problems, and proposes specific strategies.

## 1 Structure and function of postgraduate training system in universities

In the postgraduate education business system of colleges and universities, the training system is the central hub that connects teachers and students, and connects teaching and learning. The information system displays student information, tutor information, course arrangements and academic performance. These four pieces of information come from the student status system, tutor system, and educational administration system. In addition, the training system also carries the functions of filling in training plans, research opening reports, mid-term reports, academic reports, and social practices. This is the main content of graduate students' study and life.

Taking the evaluation of dissertation as an example, the evaluation of thesis is usually divided into general review, single-blind review and double-blind review. First of all, the education management cadres of the academy department publish the information of the review experts, send an invitation to the experts in the information system or through email invitations. After receiving the experts' replies, the administrators set permissions in the background. The experts can download the degree papers through the training system, and fill in the review comments. Taking the opening report as an example, graduate

students need to fill in the opening report and evaluation form through the system; then the system will automatically send it to the tutor. After the tutor is approved, the education cadre of the institute will review and fill in the comments; then the teacher organizes the evaluation and fills in the evaluation in the system. Finally, it will be submitted to the Training Office for review and record.

## **2 Issues in the information training system for graduate students in universities**

Informatization training system has many advantages, but the number of users and user roles involved in the system are relatively large. There are many training management links, and the process is relatively complicated. It is inevitable to encounter some problems in the implementation process.

### **2.1 Issue with users' needs**

At the beginning of the establishment of the informatization training system, preliminary research will be conducted, and the system will be set according to user needs. However, due to the relative complexity of the system, each department may have different requirements for the same function during use. For example, in the paper review mentioned above, different faculties may adopt different review methods. Some take a review, and some combine blind reviews. The combination of multiple evaluation methods increases the complexity of system design. On the one hand, in order to solve this kind of problems, we should complete the preliminary research, and set up complete and rigorous research questions. The needs and establishments of multiple parties are integrated to avoid later modification. On the other hand, the system can be more flexible when designing the system, allowing more freedom for users. That is how we can strengthen the service of the information management system, and produce the human-friendly design.

### **2.2 Issue with information technology**

These are the direct factors of higher education informatization. The information training system will go through the trial operation stage. During this period, the system will be tested for whether its performance is good, and whether the requirements are met. And the system will also be tested for whether it is complete, stable and simple. Due to

the feasibility of the system, friendly interface, the training system has encountered many kinds of users, a large number of visitors, more complicated processes, and information interaction with other systems. It puts high demands on the performance of the training system. Therefore, colleges and universities should guarantee the security of campus network in all aspects and allocate funds for hardware construction to ensure the safe, stable and efficient operation of information management.

### **2.3 Issue with informatization performance**

Information system construction is a major issue that affects the development of higher education in China. Information systems serve teaching management. The real purpose of information systems is to benefit teachers and students. In addition to meeting the needs of daily teaching management, the information management system should also analyze the quality of postgraduate training and learning, and be able to efficiently and quickly alert and supervise to ensure the quality of postgraduate training.

## **3 Strategies for the construction of postgraduate information training system in universities**

### **3.1 Strengthening top-level design, information standardization and data interface construction**

Informatization construction should started from the capstone design by formulating a systematic and comprehensive system. The system should have clear data standards and data interfaces, based on actual needs and future development. The information management department should use the national informatization standard when formulating information standards. They should consider the specific conditions of the school. Each university should not only consider the system integration of the education authority, but also involve the data sharing with the school's personnel, scientific research and other related departments.

In recent years, postgraduate exams need to be registered by online system, and all diplomas need to have online information recording, which meet various needs. When constructing information management systems in colleges and universities, realistic requirements should be taken into consideration and be well integrated with these

systems. We should simplify the process as much as possible during design, reduce the workload of information management personnel, and make it convenient for users.

The construction of informatization in colleges and universities requires the cooperation of various departments: personnel, scientific research, finance, employment and other departments. Information construction is a process of information standard collection, data interface design, data sharing and system integration. The system should be designed according to the existing national standards and industry standards to ensure the data interface to the education authority. At the same time, the data interface of school information construction should be obeyed to realize the data sharing between various departments in the school.

### **3.2 Strengthening the construction of the postgraduate education information team**

To promote the informatization of graduate education, we must first build a high-quality, pioneering and innovative information management team. Information management personnel must recognize the important role of information management in teaching management. To eliminate their fear and rebellion of information technology, they must change their point of view. Secondly, it is necessary to improve the skill of management personnel of the school's graduate education management departments, and cultivate their information management capabilities and information platform operations. It is necessary to strengthen the professional skill level of the team, select talents who have a deep understanding of information technology, and have rich experience in education theory to information management, so that they can play an important role in the construction of postgraduate training and management information. To improve the information application and service capabilities of graduate education, attention should be paid at all aspects of the system construction. In the construction process, we should highlight the integration of management and technology.

### **3.3 Changing the concept and improving the information service capability**

The concept of system design should be transformed from "management-oriented" concept to "service-oriented" one. System construction should be people-

friendly. We should change the manager's perspective into the server's perspective. And we should emphasize the service concept in graduate education. The system design should be based on user needs to design a humanized model, and the system interface and function settings should be based on user needs. The graduate education information system has accumulated a large amount of data information. The information management department should strengthen the analysis of data, provide users with data retrieval and analysis functions, mine related data, explore the law and value of data, and provide information services for teaching management. Information managers should build an information platform with the concept of service teaching and strengthen cooperation with managers. At the stage of analyzing the needs for system, we should seek opinions and suggestions from various kinds of people, and analyze the needs comprehensively and accurately; At the system design stage, we should meet the development trend of graduate education and technical development requirements, and consider the practicability, advancement, and scalability of the system; At the development stage, attention should be paid to the standardization of procedures. We should make the program more readable and reusable, and reduce the difficulty of system maintenance. In the system testing phase, the test should be comprehensive and sufficient to ensure that all aspects of the system run smoothly, and avoid errors in the system operation process and dampen the user's enthusiasm for using the system. Finally, at the operation and maintenance stage of system, a sound information feedback mechanism should be established, and system functions should be continuously optimized and upgraded to meet the new needs of postgraduate education and teaching mechanism reform.

## **4 Conclusion**

The construction of higher education informatization is affected by the needs of teaching management and information technology. The construction of an informatization training system is a long-term and systematic project and an important part of the graduate training system in universities. The establishment of a training system based on a network platform is conducive to further standardizing

and optimizing all aspects of the graduate training management process, strengthening the monitoring of the training process and promoting graduate education innovation. It will help improve the quality of graduate training.

## References

[1] Fu KY, Wang JJ. Research and exploration of the

informatization construction of graduate academic practice activities: Taking Xidian University as an example [J]. *China Information Technology*, 2020(08): 72-75.

[2] Zhang L, Li T, Liu QG. Improving the level of graduate student management informatization and helping the school's "double first-class" construction[J]. *Education Teaching Forum*, 2020(04): 25-27.