Research on the process of university student resources mining and application based on resource Service center

Bingcheng Sun*, Jinfeng Li
Academy of Information & Communication National University of Defense Technology, Wuhan, 430010, China
* Corresponding Author Email: 94430776@qq.com

Abstract. In view of the current situation of student resources mining and application, this paper establishes the overall framework of university student resources mining and application, optimizes and designs the process and specific actions of university student resources mining and application based on resource service center, and specifically studies the construction of supporting environment based on resource service center.

Keywords: Resource Service Center; student resources mining; application process.

1. Introduction

Pedagogy believes that students are educational objects and educational resources, as well as basic resources. College students have relatively rich experience, diverse source structures, relatively complete types, and rich practical resources, intellectual resources, professional resources, unit resources and talent resources, which bring inexhaustible resources to college teaching, research and management. How to excavate and make good use of this important resource to improve the quality of talent training and the benefits of running a school has become a major realistic task faced by college education.

2. The overall framework of university student resources mining and application

There are generally the following problems in the exploitation and utilization of student resources in colleges and universities. First, the resources on hand of teaching, scientific research and management personnel are lacking and obsolete, the pertinence of teaching, science and management is not strong, and there is a big gap between them and social needs. Second, it is difficult to form a closed information loop by using fragmentary resources mining, and it is difficult to share students' resources with closed management. Third, the system and mechanism of resources exploitation and utilization are not perfect, and the benefits of resources are low.

Is focused on the bottleneck problem of the current mining application, based on the "study first, close to the demand, around the problem, open innovation research train of thought, identified" on the basis of theoretical innovation, focusing on practice, in order to ensure the system specification, supported by information environment "work points, as shown in figure 1 is constructed of student resources mining application framework.

2.1. Content of student resources

One is practical resources, familiar with the current situation of enterprises, companies and social needs; Second, intellectual resources, based on academic education and work practice, have certain independent opinions and reflections on theoretical and practical issues related to business development; Third, professional resources. Students come from various business fields and positions and are familiar with the knowledge of various business fields. Fourth, unit resources, familiar with the construction, management, operation and other aspects of the unit, to provide materials for the combination of teaching and scientific research; Fifth, talent resources. Students are excellent in
various business fields and can provide talent support for teaching, scientific research and management.

2.2. Digging action subject

In the era of big data, everyone is the source and host of information resources. Similarly, in student resource mining activities, educational workers in colleges and universities are miners, and students participating in training are miners. We should set up the concept that everyone is a digger, everyone digs, everyone uses, digging with, digging with, widely mobilize the enthusiasm of digging, and promote the in-depth development of digging work.

2.3. Mining method mode

In view of the difficulties in resource sharing and application of students who have resources and do not know who to use or who to find when they need resources, this paper innovatively studies the student resource mining and application mode based on resource service center, and specifically designs resource mining actions such as demand analysis, resource discovery, resource connection, resource reorganization, resource push, and resource service.

2.4. Excavating rules and regulations

With a view to digging in accordance with the law and orderly use, it has studied and formulated rules and regulations for the organization, implementation, management and guarantee of mining and use.

3. Process design of university student resources mining and application based on resource service center

Optimization based on resource service center "led by requirement analysis, resource discovery - resources - the BGF - push - resources service" interlocking, self-closed-loop students complete link resources mining, elaborate design requirement analysis, resource discovery, resource connection, resource guide, resources, integrate resources, service resources, use and information feedback and so on mining operations, as shown in figure.

Figure 1. Resource mining process based on resource service center.
3.1. Problem-centered demand analysis of "learning, research and management" resources mining and application

Teaching and scientific research institutions, administrative institutions and other institutions, as well as teachers, students and other personnel, based on the task undertaken, problem-centered information resource demand analysis, put forward a list of students' resource demand, clear "what is needed". At the beginning of the semester, each unit conducts demand analysis based on the system and declares demand to resource service. In the semester, according to the teaching, scientific research, management situation further correction needs; at the end of the semester, feedback on demand situation is carried out to provide reference for the next round of resource mining and application.

3.2. Students take the initiative to declare the student resource discovery action combined with multi-party communication

Through the resource declaration system, students take the initiative to declare resources according to the types of resources such as practical resources, intellectual resources, professional resources, unit resources and talent resources. Teachers and students have a deep understanding of the resources mastered by students through counterpart discussions and discussion exchanges. Based on active declaration and in-depth discovery, master student resources in an all-round way, form a list of student resources, and clarify "what there is".

3.3. Attract and gather student resources from the edge to the resource Service Center

The student Resource Service Center organizes the introduction and reception of student resources that are actively declared and deeply discovered by using the resource leading system according to the characteristics and resource list of all kinds of resources and according to the resource leading plan, and adopts the combination of automatic and manual leading to organize the introduction and reception of student resources, which lays a foundation for resource reorganization and utilization.

3.4. Multi-dimensional display of student resources integration and reorganizing action

According to "focus on demand, service utilization, with construction, digging with hinge" principle, under the unified comprehensive deployment of resource service center, according to the different types of sources, users at different levels, different business scope and resource requirements, use of the resources service center related support module, for all the source of the resources of the lead after processing, to generate accurate and timely resources products, And publish a list of resource products on the Internet.

4. The construction of supporting conditions for university student resources mining and application based on resource service center

Take the resource service center as the main body to construct the supporting environment of student resources mining and application. The system structure of the resource service center can be summarized as "two layers and two systems", that is, the basic bearer layer, the service application layer, the security system and the operation and maintenance management system.

4.1. Foundation bearing layer

Based on hardware facilities such as network, computing and storage, and Internet deployment, a computing and storage resource scheduling and management mechanism is established to form a service bearer platform for wide-area distribution, unified management and cross-network information exchange, supporting the deployment and operation of various resource service systems with different network security requirements.
4.2. Service application layer

Based on the basic bearing layer, it integrates the practice, intelligence, specialty, unit, talent and other resources of trainees through various modes, and provides various resource services for teaching interaction, scientific research integration, management coordination and enterprise construction through a unified application entrance.

4.3. Security and secrecy systems

The security and confidentiality function of the resource service center is provided to provide support and guarantee for user trusted access, network trusted connection, resource service trusted access, and behavior tracking, so as to realize the trust in the whole process of resource service organization application.

4.4. Operation and maintenance of the management system

Provide support for the daily operation and maintenance of the resource service center.

5. Conclusion

The purpose of student resources mining in scientific research practice is to provide them with more opportunities to apply and practice knowledge, so that they can constantly understand and explore the frontier of the discipline in the process of learning knowledge.

References

[5] Bingmu Chen, Research on Sharing of teaching resource platform, Modern Distance Education.2004(64)