Subject Service Practices in Sichuan Agricultural University: Based on Survey of Users’ Crisis

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Abstract

Based on data information from 3 polls targeting library services in Sichuan Agricultural University from 2011 to 2013, this paper probed into agricultural universities’ performances and problems concerning university libraries’ subject services. Results indicated that library users are not satisfied with libraries’ basic services, which highlighted the urgency of innovation. In addition, subject librarians’ professional background and information literacy may serve as major preconditions for providing subject services; and only combined with departments/institutes’ teaching and research can subject services’ value and life force be reflected. It was proposed that measures like changing concepts and unceasingly innovating service mechanisms should provide significant guarantee for implementation of subject services.

Keywords

Agricultural Science; Subject Service; Subject Construction; Service Pattern

Introduction

Subject service is a new service pattern adopted by libraries to upgrade service value and improve user relationship, which goes beyond libraries’ traditional service scopes and reflects a new dependent and interactive relationship between libraries and university education/scientific research institutions. When it comes to addressing libraries’ user crisis and adding vigor to libraries, innovation in subject service is of great practical significance.

Agricultural universities are important institutions providing agricultural education and researches to serve agriculture. Libraries’ service quality has a direct effect on user relationship and libraries’ service value. Specifically, from the aspect of value system, the service provider is the main value creator and the service pattern/system is the value-adding tool, while users and their satisfaction (involving quantity, quality, influence, etc) act as the value’s carriers. Utility theory reveals that with availability of same document resources, the library which offers more extra services will see higher service values and utilities where users will obtain more benefits, finally leading to higher amounts in total “input-output” values, namely under such conditions, higher-quality services from libraries to users are not only representation of maximum values between resource investment and effectiveness output, but also important standards to evaluate libraries’ service and users’ satisfaction.

Therefore, this paper uses experimental, observational, typical investigations and statistics, such as research methods, takes the library’s user crisis in Sichuan Agricultural University (one of Project 211 universities) as an entry point with focus on innovation in subject service and demonstrates how libraries can rebuild user relationship, help users efficiently obtain literature resources and improve users’ knowledge transfer ability for practical exploration, thus providing key support for adding vigor to agricultural university libraries and enhancing their service values.

Dependence Relationship Analysis Concerning Agricultural Universities’ Libraries and Users

Whether users approve and choose library services is based on users’ perception of library services’ value and their satisfaction. That is, when choosing library services, users will take things like the service content and pattern provided by libraries into consideration as prerequisites in deciding whether to choose or accept such services.

In order to fully understand users’ perceptions with regards to library services, surveys were conducted through on-line questionnaires (including 653 student questionnaires and 4 teacher questionnaires), interviews with representatives (including teacher and student users), random opinion polls, observational method, etc, with focus placed on “service selection”,


“user need” and other contents targeting Sichuan Agricultural University Library’s users so as to reveal value orientation with regards to users’ selection of library services.

**Student Users’ Selection of Library Services**

According to the research results, self-study and book-borrowing users took dominant positions (accounting for 77.49% and 64.47% respectively in library users), which showed higher student user dependency on the library’s document borrowing service and environment service. From perspective of value orientation, this reflected users’ recognition for the library’s space value and basic borrowing service value, but can not be taken as students’ recognition of or dependency on resource utilization, literature information transfer ability and other values (See Fig. 1)

![Number of people](image1)

**FIG. 1 STUDENT USERS’ DEPENDENCY ON LIBRARY RESOURCE AND LIBRARY SPACE’S SERVICE**

Aforesaid statistical results showed that main purposes of the library’s student users were borrowing books and self-study while opinion polls indicated that teachers hardly chose the library’s facility/environment service or borrowing service.

**Current Situation Concerning Student Users’ Utilization of Document Resources**

Fig. 2 reported the highest borrowing rate in paper-based resources among students, a low borrowing rate (lower than half of paper-based resources’ utilization rate) in electronic resources (including e-books and periodicals) and the least attention (utilization rate) in foreign-language electronic resources and trial database. According to the literature-purchasing input and structure, the university allocates 10 million RMB per year (about 40% used for purchasing paper-based literature and around 20% for purchasing electronic resources). But the e-resource’s utilization rate is less than half of paper-based resources’ utilization rate, which raises doubts about existence of obstacles hindering users’ use of e-resource. Results from opinion polls showed that almost every user had tried to use e-resource, but the recall ratio, precision ratio, fall-out ratio, unavailable of download and so on were the main factors that affected such use.

![Graph](image2)

**FIG. 2 SITUATION CONCERNING STUDENT USERS’ UTILIZATION OF LITERATURE RESOURCES**

**Users’ Use of Electronic Resources and Obstacles**

Users’ use of electronic resources and obstacles, presented three issues.

Firstly, it displayed a higher overall demand for e-resources on users’ part, but those who didn’t know how to use such resources occupied 84.19% of all the people surveyed, proving that the main obstacle hindering users’ use of e-resource was lack of knowledge and skills with regards to application of database.

Secondly, 76.48% of the users showed dissatisfaction with some e-resource service environment, indicating that there were insufficiencies in publicity & education, resources & environment construction and maintenance.

Thirdly, there were few users interested (only 7.3% of the people surveyed) in trial data—a thought-provoking phenomenon. Each year the library would launch several free trial databases, including several high-quality resource databases like Web of Science and Springer Protocols. Why did such databases attract few users and little attention? There were three possible reasons: 1. Users paid little attention to the information on the library’s homepage; 2. Users were normally insensitive to relevant information; 3. Insufficiency in publicity deprived of those in need of such materials of the chance to know and use such trial
resources.

**Users’ Selection of Library Services**

During the open-ended question survey, evaluation and suggestions concerning library services from users surveyed focused on network environment, quality of resources and demand for information and skill education, etc., with higher demands for the e-resource utilization capacity and network environment services. Teachers would not use regular services but gave more attention to tool (like open-ended network resources and network-based academic guidance) development and utilization together with in-depth development and utilization of literature resources.

**Research Conclusions**

Firstly, student users are still accustomed to the traditional services by showing a higher dependency on facility/environment service and paper-based document service, together with an urgent demand for learning modern document information retrieval skills.

Secondly, student users’ information literacy needs to be enhanced. Students have some blind spots in types of document resources, basic rules governing document organization, and resource obtaining methods as well as limited ability in identifying effective information, capturing documents which are not officially published or have no official carrier, and establishing primary documents. In particular, junior and senior students are devoid of systematic education and training in terms of why and how to write reading reports and reviews, how to discover a research project and how to propose a research hypothesis, properly cite references and achievements, together with information literacy education.

Thirdly, teacher users pay extremely low attention to the library’s basic services. The typical investigation showed that more than 95% of teachers hadn’t visited the library for years and they were not interested in the library’s basic services, displaying a low dependence on the library. This may give rise to speculation of changes in the library’s service values.

**Practical Exploration in Subject Service Pattern Innovation**

Subject service (also referred to as subject librarian system) is an inevitable product and important channel in modern libraries’ pursuit of development. Unlike the traditional services, subject service is an advanced service pattern characterized by pioneering, pertinence, embed ability and individuation, through which university libraries support discipline construction. Those workers engaged in such service are called Academic Liaison Librarian, Subject Specialist, Subject/Faculty Librarian or Research Support Librarian, etc.

**New Thoughts in Exploring Subject Service Pattern**

Based on the science and education function of Sichuan Agricultural University, the library launches subject services under guidance of following basic thoughts: taking “promotion of the agriculture subject’s development and expansion of literature resources’ in-depth services” as the goal, “establishment of user relationships” as the premise and “reinforcement of literature information and knowledge transformation service” as the orientation, to form a service pattern and realization route integrating information literacy education, knowledge popularization, professional education, scientific interest cultivation and employability enhancement.

**System Construction in Subject Service and Major Items (Table 1)**

<table>
<thead>
<tr>
<th>One system</th>
<th>Two platforms</th>
<th>Service project</th>
</tr>
</thead>
<tbody>
<tr>
<td>System of subject service</td>
<td>Subject Service platform</td>
<td>Database resource retrieval platform</td>
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<tr>
<td></td>
<td></td>
<td>Net resource guiding platform</td>
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<tr>
<td></td>
<td>Information literacy Service Platform</td>
<td>Check &amp; examine agency and literature delivery platform</td>
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<td></td>
<td></td>
<td>Training service for use of special resource</td>
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<td></td>
<td></td>
<td>Four-level information literacy education</td>
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<tr>
<td></td>
<td></td>
<td>Project initiation and achievements-based novelty search service</td>
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<tr>
<td></td>
<td></td>
<td>Project support/training service</td>
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<tr>
<td></td>
<td></td>
<td>Science interests training service</td>
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<td></td>
<td></td>
<td>Dynamic evaluation service for subject construction</td>
</tr>
</tbody>
</table>

**FIG. 4 ROLE DEFINITION OF SUBJECT LIBRARIAN**
In Subject Service System, subject librarians play a key role under multiple identities including information expert, teacher, project member and cooperative partner in delivering education and key subject group (Fig. 4) services.

**Primary Missions in Subject Service**

*Construction of Subject Service Platform*

A subject service platform has three basic missions: first of which is to organize subject service teams and appoint a specially-assigned person in charge of services for corresponding departments and key subjects; second is to establish a subject service-based net portal, open an information resource retrieval platform and special service programs, including online QQ consulting service and users’ participation in the library’s cultural construction; the third mission is to set up self-study section, group discussion section and relaxing & reading sections, to guide users to integrate professional learning and literature resource utilization.

*Construction of Four-level Information Literacy Education Pattern*

Information literacy education is one of major projects in subject service. China’s Outline of 12th Five-year Plan on Education Development stipulated that university education should focus on training high quality personnel with “innovative awareness, innovative knowledge and innovation ability”. Based on such requirement, the four-level information literacy education plan was brought up.

(1) Level-one: education and training. Level-one’s educational objectives is to popularize information consciousness, help freshmen blend into their college life quickly, develop active reading and self study habits, thus laying foundation for professional learning, social practice, scientific research, etc. Therefore, Level-one is divided into four phases (see Table 2).

<table>
<thead>
<tr>
<th>Stage</th>
<th>Goal</th>
<th>Form</th>
<th>Mission</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Understanding the library</td>
<td>Lecture “University’s second classroom-library”, introducing the library’s functions, rules and types of service</td>
<td></td>
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<tr>
<td>2</td>
<td>Observing literature’s classification &amp; organization</td>
<td>On-site visit Introducing the library and its document classification, organization &amp; arrangement rules</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Bibliographic search training</td>
<td>Skill training Training users to organize literature and arrange shelves for literature, to find reading materials, engage in active reading and capture information, cultivating their awareness to labor and self-discipline, turning them into advocates of using literature resources</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Innovative reading</td>
<td>Reading Guiding students to read properly and inspiring innovative awareness and innovative study, just as the saying goes “Knowledge comes from books as well as practices”.</td>
<td></td>
</tr>
</tbody>
</table>

(2) Level-two: retrieval skill education. This level adopts innovated “literature retrieval and utilization program”, taking enhancement of users’ information identification and retrieval skills as the basis, with focus mainly placed on increasing depth and extensiveness in users’ exchange, delivery and utilization of information and guiding innovative study. The service pattern is “classroom teaching-lecture opening-practicing”.

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**TABLE 2 EDUCATION THEME AND CONTENT IN LEVEL-ONE TRAINING**

**FIG. 5 FOUR-LEVEL INFORMATION LITERACY EDUCATION PATTERN**
(3) Level-three: practical training of information literacy. According to junior and senior students’ learning characteristics and diversifying choices (including direction selection after graduation, professional development and scientific research activity), four key services are carried out.

Firstly, setting up an open class-Information Literacy Development; secondly, collecting graduation thesis’ information and offering guidance concerning how to use such information; thirdly, opening special lectures regarding how to write professional reading reports, literature reviews and graduation thesis together with training in such aspects; fourthly, conducting major courses-based information literacy training by integrating with major courses (e.g. Agriculture Industrialization and Standardization, Studies in Rural Development and Phytophysiology).

(4) Level-four: information literacy training for graduate students. Given postgraduates’ learning objectives, the subject service attaches equal value to retrieval ability and in-depth resource utilization, focusing on training users’ literature resource utilization, exploitation, transformation and research & analysis ability, closely linking “problem detection-problem analysis-making research programs” with “thinking-discussion-summation-evaluation”, to the extent that users may fully understand the logical frame of scientific researches and can dig out, transform and utilize principles and rules in literature resources.

In conclusion, the four-level information literacy training service provides valuable service to improve every user’s information literacy and lifetime learning” from beginning to end.

**Major Subjects and Projects-Oriented Services**

In light of contradiction between information requirements and supply in key subject construction, the subject service program launches three types of service.

(1) Pushing novelty search, checking and examining agency and literature delivery services, involving novelty search on opening reports & achievements, dissertation quotation, SCI\ CSSCI\ EI\ STIP record & retrieval, and important document delivery.

(2) Carrying out cultivation service for talent reserves in key subject construction. Considering demands for literature resource development and utilization in key subject construction and major projects, a scientific research support team—Science Vanguard Group is set up. It is a scientific research interest group devoted to cultivating students’ information literacy, professional competence and interests in scientific research, serving enterprising students who love reading and have intensive interests in using scientific and technical literature information. According to the tasks of subject service, Science Vanguard Group was made up of 60 freshmen in Year of 2011, who were divided into 11 teams for 2-year-long systematized intensive training in information literacy. The purpose is to help them enhance their information literacy comprehensively, turn them into excellent literature information users who have outstanding information literacy as well as great love in their majors and value scientific research, and finally translate them into the supporting force and backup members for colleges/institutes and key subjects who can participate in scientific research projects/activities (see Table 3).

<table>
<thead>
<tr>
<th>Name</th>
<th>Member</th>
<th>Main training tasks</th>
<th>Name of completed projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scientific Research-based Interest Group</td>
<td>Sophomore students and above</td>
<td>1. Developing research interests; 2. Cultivating close integration of professional theory and practice; 3. Training information-into-knowledge transformation ability; 4. Training information collection, organization, analysis and utilization ability; 5. Training comprehensive abilities including communication, writing and expression, etc.</td>
<td>1. Farmers’ specialized cooperative economic development patterns in Chengdu 2. “New children, new countryside” 3. One Foundation sponsored project —Caring for growth of children in disaster areas</td>
</tr>
<tr>
<td>Scientific Vanguard Group</td>
<td>Freshmen 11 teams</td>
<td>1. Training information literacy covering information consciousness, information technology, information transformation &amp; utilization and information morality, etc; 2. Training innovation consciousness and ability; 3. Training ability to find and solve problems; 4. Training ability to write reviews, reports and theses; 5. Training ability for professional development and scientific research; 6. Training management and writing ability to the extent that they can act as the image spokesperson of the library.</td>
<td>1. Supporting 5 scientific projects of School of Economics and Management 2. Supporting 5 projects of Agricultural College</td>
</tr>
</tbody>
</table>

TABLE 3 SCIENTIFIC VANGUARD GROUP AND SCIENTIFIC RESEARCH-BASED INTEREST GROUP
(3) Engaging subject librarians in scientific research projects to guide users in research activities. Based on the students’ requirements for upgrading comprehensive abilities, the subject librarians should directly guide students in scientific research practice by applying programs to rebuild the dependence relationship between the library and users in scientific research activities and help users finish scientific research tasks through literature resources (see Table 3).

The paper holds that from the objective point of view, integrating the subject service into key subjects and major projects plays a positive role in improving students’ comprehensive abilities, encouraging users’ interest in scientific research and professional learning and rebuilding user relationships.

**Dynamic Analysis Service for Subject Development**

In many educational experts’ opinion, essential discrepancies among universities lie in levels of subject development. Therefore, some universities take strategies which see subject construction as working priority in order to push forward leapfrog developments.

However, Subject Service Team of Sichuan Agricultural University Library argued that the subject’s development planning is an important part in subject construction and such planning should mainly be based on mastery of subject development’s trends. Therefore, another function of subject service is to provide decision basis for key subject planning and construction by tracing/analyzing levels and trends of the key subject’s productive force development, such as influence, competitiveness, SWOT (strengths, weaknesses, opportunities, and threats) and other important information of the scientific research team compared with peers at home and abroad.

**Problems and Suggestions**

**Mechanism Construction and Personnel Training**

The most realistic problem is what measures subject librarians should take to break years-long isolated library-user relationship and build a new service environment, which depends not only on full-time librarians’ professional background but also on their general qualities (including working attitude, sensitive information consciousness and comprehensive abilities to deal with complex interpersonal environments). Therefore, lack of incentive systems and talent reserve mechanisms becomes a bottleneck in carrying out subject services.

To introduce talents is impractical, but this is not true for exploring existing subject librarians’ potentials.

Suggestions: (1) enhancing training for subject librarians and creating more training chances; (2) strengthening relevant system and mechanism construction to provide guarantee for implementation of subject services; (3) encouraging subject librarians’ participation in professional teaching and scientific research to give them a chance to understand users’ need and provide users-oriented services.

**Close Combination of Publicity and Users’ Perception to Help Gain Users’ Understanding and Support**

Rapid development in modern information technologies has objectively isolated high-end users from “brick-and-mortar” libraries. So libraries face the unprecedented user crisis and existence value crisis, and such crises have a great influence on the launching of subject services which are specifically embodied in difficulties during communication with departments, difficulty in embedding services and poor interactivity among principal bodies.

Thus, libraries should upgrade service quality and service advertising via various ways and methods, using quality to move users and reshape libraries’ service value.

**REFERENCES**

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