Study on the Evaluation Ability of Personalized Information Service of Higher Vocational Library

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Abstract
Higher vocational library personalized service, refers to the user's preferences, habits, such as unique requirements for information services, it is aimed at higher vocational teachers and students in the teaching, scientific research and the different needs of a corresponding type of service. The root of the individualized service is to respect the user, the user's behavior and habits, for the user to select more important resources and provide the more thoughtful service characteristics. From constructing the high vocational school library personalized service guarantee system, perfecting the high vocational school library personalized service content and construct the high vocational school library personalized service interaction mechanism to promote higher vocational library personalized information service to improve efficiency. In the final analysis, the high vocational school library personalized information service ability evaluation of first and second index, the result is satisfactory.

Keywords: library, personalized information service, evaluation ability

1. Introduction

In recent years, the domestic many libraries to strengthen the personalized information service system development and research, developing the individualized information service content many. Especially in many higher vocational libraries from the traditional separate function, pattern for change in the reader as the center of the teachers and students collecting, borrowing, reading integration "open service mode. And gradually realize its personalized service level. Compared with foreign countries, the personalized information service is the later started. By the end of 1999 [1-5], the state ministry of science and technology in support of the "China digital library demonstration system" project is put forward in the digital library personalized service problems; In 2002, Tsinghua university and Tsinghua tong fang sponsored by China knowledge infrastructure engineering, namely CNKI engineering, its function is to push one of active service. Since then the higher vocational library gradually developed and launched their personalized information service system. At present our country higher vocational library personalized information service application level is low, service form is relatively single. Combined with the actual situation in our country, the high vocational school library personalized information service is imminent, the significance of great [6-10].

First of all, improve information resources development and utilization efficiency. Whether in electronic literature, network database, as well as in equipment and technology, culture, higher vocational library resources advantages are other types of information department incomparable. Carry out the deep and personalized information service, let the country's investment returns, let the library resources can be fully utilized, and both can give full play to advantages of higher vocational library, and can satisfy different users for library's individualized information demand, the high vocational school library is to optimize the development and utilization of resources of one of the effective methods.

Secondly, it helps to better satisfy the needs of our clients. Library users hope to have a more personalized information space, so that they can decide according to oneself be fond of and to judge the importance of each of the resources. Because the user itself information ability difference, libraries need to provide personalized help user, accurately and rapidly find your need all kinds of information. And the advantages of higher vocational books is rich in human and information resources, the digital library and the development of information technology, strengthening the vocational library users to provide personalized information service of ability.

Higher vocational library can through the individualized information service, satisfying the different user's information needs.

Finally, the individualized information service is developed to meet the needs of the development of the high vocational school library itself. Along with the development of the network and the arrival of the era of individuation, users to the requirements of the high vocational school library gradually change. Now users no longer pay attention to collection scale, instead of the high vocational school library is attention to demand satisfaction. This requires higher vocational library change service mode, according to the user's requirements and interests' active users to provide personalized information service, so as to consolidate the position of the high vocational school library, strengthen the development of the high vocational school library.

2. Constructing the High Vocational School Library Personalized Service Security System
2.1. Set up the Personalized Knowledge Service Concept

Personalized knowledge service is the development of the information resources deeply, it is a kind of service concept, and its core is to readers as the center, to demand as the center, fully embodied humanistic care. Especially the computer technology and network technology development, the user's information requirement increasingly, libraries need to face more and more dispersed knowledge, this requires that the library should be from literature type organization into the knowledge organization. Knowledge service concern is through the staff knowledge and comprehensive analysis ability, the use of the existing literature or finds more documents, selection, reset, and work out new product knowledge to solve practical problems of readers. Its value is to provide readers how much knowledge content, and not to provide service time or the number of offer. Therefore, it needs to be in the thought idea more strengthen the people-oriented management concept and service concept, to meet the need of the people, arouse people's initiative, play the potential of people as the starting point of all the work.

2.2. Establish Personal Resource System

In the global network today, the high vocational school library needs to become a global "network library" a member of the information resources. Personalized resources information is the basis of implementing the resources sharing, and do not have the personalized information resources, will lose to the reader's appeal, will be drowned out in the vast amount of information, it is possible to become information garbage. Therefore, the high vocational school library and according to the teaching goal of, professional characteristics, key discipline, the readers' characteristics and needs, establish their own do house direction and provide service direction. Planning a distinct personality characteristic of the library collection system, build the characteristics of library resources, timely and user contact, if there are conditions, but also can let the reader to the scene for the book. Borrow campus internal network convenience condition, posted on the Internet library bibliographic order information, readers can also according to their own needs, through the network or direct contact with the staff, recommend books; In the digital age, we should establish the high vocational school library is special the digitalization of the resources, information resources of the library, in a sense, is a database resources. Therefore, the high vocational school library should highlight the key disciplines and professional characteristics. Will the collection resources further processing, make it has practical application value of the products, expand the content of the information service. Information resource system personalized basic principle, is to do "I have no one, I have all, all my new, new me fine". Especially to integrate online disordered information resources, utmost to meet the personalized needs of readers.

2.3. Meet the Needs of Different Readers to Individuation

Higher vocational library service is object mainly for the students, and teachers' scientific research personnel, school personnel. Teachers' scientific research personnel need not only the discipline of literature information, also need to related disciplines of literature information. The students to write a research paper or research also need to document information, in addition, students and more pay attention to the social life and other aspects of the literature information. According to the service object reading tendency and demand is

different, the high vocational school library provides individual service content also have each emphasis. For higher vocational students readers, library individualized service's main task is to establish a library information resource navigation system, and to lead them to use all kinds of information resources; Teachers' scientific research personnel of higher vocational teaching, scientific research work is the main force, most of them not only bear the teaching task, and bear the scientific research task. They need a lot of and a wide range of information, so that in the previous research results, the new problems and create new achievements; Outside of the readers, the library should reflect the individualized service in the information resources sharing, namely coordination use all available resources inside, use the modern Internet technology platform to realize library and library information resources sharing between.

2.4. Create Personalized Service of Librarians

Higher vocational library in the ability to license the range, can set up complete librarian training system, training content is: (1) Knowledge training, for subject librarian in the library collection are very familiar with, be skillful in use, can according to the requirements of the readers will be effective information from large, disorder, jumbled information according to certain mode selection, reset, processing become subject readers need information product. So readers no matter when and where to use what method can easily obtain and use information. (2) Skills training, librarians should is the comprehensive development of the personnel, with a foreign language, computer, library and information knowledge and professional knowledge, librarians should also learn modern technology in the higher vocational library work link utilization, especially the network information resources development and utilization skills. (3) Emotional training, the "people-oriented" is the starting point of the work in the library, the library on the one hand to the reader to the "people-oriented", the librarian also to care, care. The library according to the librarians' specialty, interest, their own conditions, pay close attention to their development, and to lead them to conscientiously study, improve all aspects of comprehensive ability. (4) Integrated skills training, training the comprehensive ability of the librarians, meet an emergency ability, knowledge combination ability, the purpose is to develop innovative services, improve the personalized service benefit.

3. Perfect Personalized Service Content
3.1. Personalized Custom Services

Under the network environment of personalized customization service refers to the provision of the specified according to the user's information needs to provide more in place of information demand, at the same time it is also a kind of culture personality and guide the demand of a kind of information service. The reader can accord their interests, hobbies and demand, in a specific system function and service form, set your personalized page, namely, to establish personal bookcase. The library to provide users with academic research material, and some common service website can only provide to the user general information, such as weather forecast, news, etc., can't meet a full range of information needs. Especially can not meet the specific scientific research personnel subject professional knowledge needs, the library personalized service website once launched by the user's attention. The American library as early as in 1997 began to my library project development, is now hundreds of library opened this service. At present domestic existing Chinese academy of sciences, the national science digital library, Hainan university library, Xiamen university, Zhejiang university library and launch My library personalized service, the user can from the library network to provide all of the library digital resources, to select the desired information organization to their own web pages, establishing personal database for future access

3.2. Personalized Search Service

Personalized customization service is librarians according to the users' different information needs, from the Internet or a database query information, and through the screening, download etc storage to a specific database for the user to use, it belongs to a more primary personalized service. the computer software has been designed to provide such service. In the service process, also can through the study of the demand of readers hobbies, usage and so on, in the interaction in the process of judgment, which related to adjust their

information needs, and accurately grasp the information user's individual needs, adjust the Angle of services and content

3.3. Personalized Recommendation

"Push" type information service is an important form of personalized service. It is according to users with retrieval condition, the resource of the latest related information timely notify the user of a kind of information service mode. The process is generally, first of all by the user input your personal files and need to find information, then the computer or staff on the Internet or database in the relevant search, regular users to send the latest relevant information. At present the information delivery can be divided into two kinds: one kind is by means of E-mail, and rely on artificial participation in the information push service; another kind is the intelligent software full automation of information push service. Personalized recommendation can according to the requirements of customers, providing personalized information resources, and can track users about information, in order to provide users with dynamic information service. The Chinese academy of sciences such as libraries use this model to carry out joint western journal title side service, Chinese academy of sciences Shanghai literature information center to carry out new book information delivery.

4. Constructing the Individualized Service Interaction Mechanism

Reader service work is the starting point of all the high vocational school library work and home to return to, the library work in high vocational school library readers as the goal, the final purpose is to for the teachers and students to provide comprehensive quality services, to provide satisfactory service for teachers and students. In order to achieve this purpose, the high vocational school library is fully analyzed different user's information needs; understand their own personalized requirements, as well as the law of their information needs. Find the demand point, so as to provide the service of specific aim, that is a kind of to the reader as the center of the main service.

In higher vocational college library service, to build the library and the readers a good interactive relationship between, on the one hand, the library to the maximum to understand the needs of the readers, so as to satisfy the demand of readers, On the other hand the library and to actively guide readers to participate in the library consciousness of the work, in order to realize the library and readers mutual influence and promote each other. Therefore, higher vocational library should take the appropriate way to communicate with readers, and know their needs and provide them with feasible solutions. Strengthen the communication with readers not only is for teachers and students to provide high quality service, which is also the need of library to achieve its own development needs. At this stage it seems, because of the high vocational school library personalized service is a relatively new field, but also in gradually mature stage, less experience, so the high vocational school library in carrying out the individualized service more should pay attention to the communication between the reader and communicate, strive for the service work on new step.

5. Data Analysis

According to the data obtained, based on the principal component analysis to determine the secondary index weight of higher vocational library personalized information service capacity calculation. Its computation formula is as follows:

$$AQ1=Q1*0.878+Q2*0.907+Q3*0.866$$
$$AQ2=Q4*0.877+Q5*0.924+Q6*0.778$$
$$AQ3=Q7*0.899+Q8*0.814+Q42*0.729$$
$$AQ4=Q9*0.873+Q10*0.913+Q11*0.880$$
$$AQ5=Q12*0.904+Q13*0.808+Q50*0.720$$
$$AQ6=Q14*0.736+Q15*0.914+Q16*0.827$$
$$AQ7=Q17*0.941+Q18*0.930+Q19*0.870$$
$$AQ8=Q20*0.899+Q21*0.899$$
$$AQ9=Q22*0.834+Q48*0.888+Q49*0.914$$
$$AQ10=Q23*0.755+Q36*0.856+Q38*0.837$$

AQ11=Q24*0.848+Q25*0.857+Q26*0.920
AQ12=Q27*0.870+Q28*0.875+Q29*0.867
AQ13=Q41*0.721+Q46*0.865+Q47*0.892
AQ14=Q43*0.773+Q44*0.948+Q45*0.795
AQ15=Q30*0.912+Q31*0.853+Q32*0.802
AQ16=Q33*0.898+Q34*0.885+Q35*0.904
AQ17=Q37*0.836+Q39*0.936+Q40*0.818

The above is the high vocational school library personalized information service ability evaluation system of secondary index score calculation formula, which use Q to represent each indicator variable, according to the problem of the serial number from the 25th - Q50, total fifty variables, corresponding to the problem of fifty. AQ on behalf of the high vocational school library personalized information service ability evaluation system of secondary index score, including AQ1 - AQ17, 17 variable.

According to the data analysis method and calculation formula, the use of SPSS13.0 statistical results, the statistical calculation, get results in the paper are as follows:

5.1. Secondary Index Statistical Analysis of the Results

According to the calculation formula of index, get higher vocational library personalized information service ability evaluation index system of secondary index scores, which is just as Table 1.

Table 1. Analysis of Secondary Index

	Mean	Standard deviation
User needs knowledge acquisition	8.0814	2.23940
Knowledge source selection and control	6.1017	2.23238
The social inventory	7.3938	2.01739
Technical support ability	6.5956	1.96531
The abundance of knowledge dimension	8.6104	2.40786
Information reveal depth	8.5709	2.48169
Information ability	8.2881	2.46983
Information association ability	8.6629	2.40847
Information organization ability	8.5404	2.42012
Information learning ability	8.4390	2.352
Depth analysis ability	7.9318	2.52097
Innovation ability	7.6554	2.70848
Information development ability	7.8089	2.67692
Service mode diversification	7.9317	2.22940
The service function completeness	7.8792	2.06537
Service platform for ease of use	8.0752	2.34029
Emotional move into	7.8896	2.25626

The above-mentioned as secondary indexes user evaluation scores. Average is the average of the score each index. Standard deviation said user to the index evaluation difference size, standard deviation difference is not big.

5.2. First Class index Statistical Analysis of the Results

To evaluate the individualized service, will influence the individualized service factor to carry on the analysis, so as to better grasp the characteristics and laws of personalized service, formulate scientific evaluation indicator system of knowledge management based on higher vocational library personalized service is mainly composed of service personnel by a certain way and the technology, the literature information resources for further processing, in order to form a certain knowledge achievements (or program) to meet the needs of the user process, and in the digital network environment often require with the aid of modern network facilities and information system to complete the author reference the evaluation method of the index will be higher vocational library personalized service evaluation content is divided into the individualized service satisfaction, personalized service personnel evaluation and personalized service environment evaluation three aspects.

5.2.1. Personalized Service Satisfaction

Personalized service for the needs of the user or the different service different ways, provides to the user service results form is also different. The results may be tangible literature form, also may be the digital file or database form and random conversations or leave a message, but also may be proposals no matter which kind of form is finally all to meet the user's needs, and knowledge is the end result of the personalized service projects. "All for the reader satisfaction" personalized service of university library is the starting point and end-result. The results meet the needs of the user how degree, and finally received effect how, this is the important content of personalized service evaluation.

5.2.2. Individualized Service of Personnel Evaluation

Based on the knowledge management of university library personalized service compared with the traditional literature information service of the biggest difference lies in: it is not just simply provide ready-made documents or information, more important is in fully understand the user's case, widely collect information, and carries on the analysis, screening, processing and restructured into new knowledge products or scheme, in order to solve the user's actual problem, satisfy the needs of our clients. In the network with the rapid development of information technology today, as a direct user-oriented, directly into the user knowledge activities, to solve practical problems for the user personalized service personnel are endowed with multiple identities, they are both user personalized service of the participants, but also the organizers of the information resources information providers, or information use navigator and information cognitive educators. This is the individualized service personnel put forward higher request. So for the university library personalized service evaluation should be from their knowledge structure and professional technical ability and comprehensive quality and various aspects, and etc. University library personalized service by individual light to complete, but also on the team, so the evaluation of the individual at the same time also need to the whole personnel allocation and service team unity cooperation ability, knowledge update ability evaluation.

5.2.3. Requires Individualized Service Environment

Service environment is the university library's developing the individualized service foundation and premise, directly related to the quality of service. To achieve to satisfy the reader requirement "must adapt to the situation, the establishment of adapt to the demand of the readers service environment. Environment shall include suitable for personalized service of the library, more important is the individualized service system. It includes network clear, open, degree of safety. Knowledge management is the personalized service system to digital library development according to user needs and use of resources and development. It is a collection of resources recommended, consulting services and information retrieval for the integration of service platform. Its purpose is to library heterogeneous digital resources foundation, according to the user's professional characteristics and research interests, provide and recommend the teaching research institutes need to resources and information. Advanced network and information system is the necessary conditions and personalized service necessary hardware environment. So for the network information system evaluation is to investigate the network and information system evaluation.

5.2.4. Index Score

According to the calculation formula of index, get higher vocational library personalized information service ability evaluation index system of one class index scores, which is just as Table 2.

Table 2. Analysis of First Index

	N	Minimum	Maximum	Mean	Std. Deviation
TOTALC	92	84.72	165.88	122.1977	19.56078
TOTALT	59	70.33	163.12	121.4131	20.78723
TOTALV	45	35.28	176.38	116.6333	23.97357
Valid N (listwise)	11				

The Mean said average, Std. Deviation said standard Deviation. Through the calculation, the score by that, Three of individualized service of one class index comprehensive scoring order ZC> ZT > ZV, namely that users to the requirements of personalized service satisfaction was the highest, personalized service personnel evaluation, the last is the personalized service environment evaluation.

6. Result and Discuss

Higher vocational library personalized information service need systematic work, need many coordination, thus forming a benign interactive operation platform. Higher vocational library personalized information services to it's for different readers to provide targeted service is increasingly, taken for granted by the favor from the masses of users. In the network environment, realize the high vocational school library personalized information service should promote interlibrary sharing. In addition to strengthen higher vocational library service consciousness, will the user growing demand as the library in the future development goals; To improve the quality of librarians, cultivate the personalized information service personnel; To establish efficient information feedback mechanism, improve the quality of personalized information service. Accelerating the transformation of library service mode, which is to provide users with high quality and effective information services.

Acknowledgements

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