

**PRELIMINARY FINDINGS OF LIBRARY STAFFS' PREPAREDNESS  
IN BRIDGING THE DIGITAL DIVIDE**

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**ABSTRACT**

*This paper reports on the rural library staffs' preparedness towards bridging the digital divide. It focuses on the knowledge of computer and internet technologies of rural library staff; the present computer and internet services provided in rural libraries; and the staffs' perception in overcoming the issues of digital divide. Data collection was carried out through telephone interviews using a guided questionnaire with twenty six respondents. The interview managed to gather ideas, useful insights and respondents suggestions in overcoming problems faced. The study found that library staff had a positive view towards bridging the digital divide. It is clear that rural library staff play a significant role in bridging the digital divide.*

Keywords: Rural libraries; Digital divide; Malaysia; Librarians

**INTRODUCTION**

Digital divide refers to the discrepancy of accessing digital infrastructure and services in societies. The OECD defined digital divide as "the gap between individuals, households, businesses and geographic areas at different socio-economic levels with regard both to their opportunities to access information and communications technologies and to their use of the Internet for a wide variety of activities". A number of measures have been developed to describe the digital divide and it appears to depend primarily on two variables: education and income. Other variables, such as household size and type, age, gender, race and linguistic background, and location also play an important role. Libraries, with their commitment to freedom of access to information, and promotion of life-long learning have an important role to play in closing the digital divide. They have been the force behind many initiatives to increase reading, literacy and access to information in the past, from the very foundation of public libraries as self-education resources for workers to the mobile libraries found in some form in all library cultures over the past century, to adult literacy and community education programs. They also

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have a key role to play in promoting use of and knowledge of disabled-enabled web technology, and promoting adaptive disabled-enabled technology on their own web sites. Public library in particular, and this includes national and provincial libraries, could act as the "community ICT access points". By reaching to nearly all communities, library computers have been an effective way to reach the "digitally divided."

Many research have been carried out regarding the issues of digital divide. (Gurak, 1999; Briggs and McBride, 2002; Zaitun and Crump, 2005) and expressed their perceptions and proposed solutions to bridge the digital divide. Shahaneem and Alimah (2001) concluded that to bridge the digital divide, libraries must provide computers with internet access to users, conduct information technology (IT) literacy programs, create a library website, introduce an electronic mobile library, establish a cyber library and develop local content. Miringgoff (2003) added that providing computers for public use is one of the most important thing a library can do. It facilitates the library to reach the disadvantaged groups consistently identified as lacking technology access and skills, and helping patrons communicate, learn, work, and create content using the technology tools.

Technology has obviously had a great impact on the rural public library. In Malaysia, the Internet development is one of the national agenda. Under the Universal Service Provision (USP), the technology and communication infrastructure have been introduced in many rural libraries in Malaysia. This project can assist the country's effort to bridge the digital and mind gap between rural and urban societies. According to Zawiyah and Saonah (2000), a library should provide access to the local and global information via online. This will facilitate anytime and anywhere access to users. Abdul Jaleel Tharayil and Rajeev (2004) suggested that libraries should provide information to the rural communities that are related to their daily activities.

#### **BACKGROUND OF THE STUDY**

The digital divide is a problem that many political and economic stakeholders' understand as being important and the issues have to be tackled. Public institutions are believed to be the best entities to reach out to the users particularly those who live in the rural areas. Rural libraries play a crucial role as a place for communication network development to support rural technology infrastructures. However, the telecommunication infrastructure alone will not guarantee that users will be able to access and take advantage of services on the network. Another issue that has to be addressed is the availability of suitable human resources. Libraries need librarians who are techno savvy and are alert to modern technologies (Shahaneem and Alimah, 2000). This is important as the library staff needs to train their patrons in modern information retrieval strategies, particularly in the use of the Internet, World Wide Web, electronic databases

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and others (Adeogun, 2003). **According to Paul (2002)**, a major issue in debating the digital divide in Asean countries centers more on usage than on wired access or computer ownership. Therefore, he suggested that libraries and librarians should be involved in all three processes (access, usage and outcome) and have their own thread of development in each of these areas. This would require library staff to master skills and have resources comprising of systems and technologies. Thus, this study intends to look at the library staffs' knowledge and skill in using the computer and the Internet and their knowledge on the issues of digital divide.

The purpose of this study was to investigate the rural library staffs' preparedness towards bridging the digital divide. It specifically focused on the following questions:

- a) Is the library staff competent in using the computer and the Internet?
- b) Does the library provide computer and Internet services to the users?
- c) How does the library staff engage herself/himself in the efforts of bridging the digital divide?
- d) What is the library staffs' perception in overcoming the issues of digital divide?

#### **METHODOLOGY**

This study was designed to explore that issue of digital divide in rural libraries. The aim of this was to obtain some ideas, useful insights and suggestions for future research. Thus, the preliminary findings are important in order to generate information for future research. A quantitative approach using a purposive sampling technique was utilized. Due to time and cost constraints, the telephone interview using a guided questionnaire were conducted. The subjects were library staff of a rural library in Selangor. Only 26 interviews were carried out where the library staff were asked to describe:

- a) their knowledge of computer and internet technologies
- b) their perceptions' on how to overcome the digital divide issue, and
- c) the availability of computer and internet technologies in rural library.

Some problems were identified during the data collection process. Among them were the difficulty in contacting the respondents which resulted in poor conclusion and recommendations of this research. The data were coded and entered onto an SPSS database and reported in terms of frequency counts.

#### **FINDINGS**

##### **Profile of Respondents**

Of the 26 respondents, 99% were female and only 1% were male. In terms of age composition, 88% were in the range of 20 to 39 years old, 8% were 40 to 49 years old and only 4% were below 20 years old and 46 to 50 years old. About 70% of the

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respondents indicated that they have Sijil Pelajaran Malaysia (SPM), 15% has a diploma, and 8% were listed as Sijil Tinggi Pelajaran Malaysia (STPM) holders and only 4% were still studying at a post-graduate level. About 50% of the respondents indicated that they worked between 1 to 5 years, whereas 23% said that they worked between 6 to 10 years. Only 15% have a working experience of more than 10 years and 12% were working for less than a year.

### **Knowledge of Computer and Internet Technologies**

The findings showed that about 65% of respondents were good in using computer technologies compared to 35% who were claimed that they only have little knowledge in using the technologies. Meanwhile, the knowledge of Internet technology among rural library staff indicated that the majority (76%) of the respondents have good knowledge compared to 24% who were not sure and poor in using the Internet.

The findings (Table 1) shows that the rural library staff were satisfied with their knowledge of computer and Internet technologies with each of the item stated having a mean of 3.81 (almost satisfied) and 4.08 (satisfied).

Table 1: Knowledge of Computer and Internet Technologies

<b>Item</b>	<b>Status</b>	<b>Mean</b>
Computer technology	Almost satisfied	3.81
Internet technology	satisfied	4.08

The knowledge of respondents on the issues of digital divide were also tested. Respondents were required to describe the best definition of digital divide. Table 2 shows that more than 80% gave the correct answer which is item 2. Less than 15% provided the wrong answer (items 1 and 3).

Table 2: Digital Divide Definition By Respondents

<b>No.</b>	<b>Item</b>	<b>%</b>
1	The gap between urban and rural areas in the aspect of electrical and water supply.	11.5
2	The gap between individuals with regard both to their opportunities to access electronic information and tools	84.6
3	The gap between individuals with regard to the social and economic factors such as education, income, job and so forth.	3.8

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**Library Staffs' Perceptions Toward Bridging the Digital Divide**

There is no doubt that the computer and Internet technologies have had a great impact on libraries and librarians. The next set of questions required respondents to give their opinions on the approaches the library has to take in order to bridge the digital divide. Table 3 depicts the rank order of suggested approaches to bridge the digital divide. There are eight attributes that describes the approaches. Most of the respondents agreed with the approaches given. Items 1 and 2 received the highest rank compared to item 8.

Table 3: Suggested Approaches to Bridge the Digital Divide

No.	Item	Mean	Frequency
1	Library staff should learn and understand the knowledge of computer and Internet technologies	4.46	Strongly Agree
2	Increase the ICT tools and facilities in rural libraries	4.46	Strongly Agree
3	Discuss with colleagues any issues or ideas which is relevant to the subject of digital divide	4.35	Agree
4	Library staff should go for IT training	4.31	Agree
5	Educate and train user on using the computer	4.27	Agree
6	Update the library website information	4.27	Agree
7	Design and create rural library websites	4.27	Agree
8	Conduct information literacy programs such as seminar, exhibition, and workshop for rural communities	4.19	Agree

Table 4: The importance of Internet Technology

Statements	Agreed	Disagreed	Not Sure
Library staff needs to embrace the Internet and make it the focus of their profession if they want to bridge the digital divide.	53.8%	30.8%	15.4%
The Internet service has given equal opportunities for rural and urban communities in accessing information. Now everyone has equal access to the same information	69.2%	26.9%	3.8%
The Internet service has made it easier to solve the issues of digital divide	61.5%	26.9%	11.5%

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Respondents were also asked about the importance of Internet technology in bridging the digital gap. They were required to indicate whether they agreed, disagreed and not sure. Table 4 summarizes the results.

Many library staff who participated in this survey commented that the Internet is a useful tool and resource to bridge the digital divide but nearly half of them disagreed that the Internet should be the focus of their profession. Most probably they felt that other factors would also be important in bridging the digital divide. However, a majority of the respondents believed that the Internet services provide equal access to information in the societies and therefore helps to bridge the digital divide. The results clearly showed that the library staff agreed that the Internet has helped to narrow the gap between rural and urban areas.

#### **Computer and Internet Use**

The respondents were asked whether or not the library had computer and Internet access. The findings showed that all libraries do have computers but not all libraries provide Internet access to the users. The results showed that only 92.3% have Internet access. Although the library has been equipped with computer facilities but most of the respondents (77%) reported that computers were not enough in their library. The survey also queried the respondents on whether the Internet had increased or decreased library usage. About 88% indicated that the Internet has increased the number of people using the library. Only 12% reported that there was no difference in usage before and after the Internet services were introduced. The survey also indicated that teenagers (88%) were the most common Internet users at the library compared to children (8%) and adults (4%).

#### **CONCLUSION AND RECOMMENDATION**

Overall, library staff have good knowledge of computer and Internet technologies and thus it will help them to educate users in learning computer and Internet technologies. They also understand and are being exposed to the issues of digital divide. They believed that computer and Internet technologies are essential tools to narrow the gap between the rural and urban areas and therefore they have positive feelings about learning the computer and Internet technologies. Although that Internet services are a useful tool to bridge the digital divide, half of them agreed that it should not be the focus of libraries. Based on the findings above, it was noted that the most important factor is to learn and understand about computer and Internet technologies.

The results also revealed that libraries are equipped with computer and Internet services but the number of computers should be increased to ensure that users can use and access

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electronic information resources. Primary findings of the user study reported that the majority of Internet users were teenagers. Therefore, efforts should be made to attract users from different categories to come to these libraries. This would encourage them to use the libraries and indirectly would inculcate the techno savvy populace.

One of the many conclusions arrived at in this study is that rural library staff have positive perceptions towards bridging the digital divide. It is clear that rural library staff do play their roles in bridging the digital divide. Another issue to be addressed is the availability of staff. The study found that most of the libraries are lacking in staff numbers. The researcher feels that it is essential for these libraries to increase the number of staff who are techno savvy.

Since the number of participants in this study was small, and the study is still at the preliminary stage, generalising the results is an uncertainty. Hopefully, it will generate enough interest for further in-depth investigations in identifying the role of rural libraries in bridging the digital divide throughout Malaysia. These and other studies could point the way to describe the appropriate methods of bridging the divide.

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