

Teachers' Perception of the Library Automation: A Case Study of a Malaysian Resource Center

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Abstract: Automation is an essential technology today. It is crucial that school library changes its role and upgrades it to comply with the new demands of new information programmes. Singh (1996) emphasized for library to change its role because school libraries today are no longer the traditional reading rooms and study halls; they are evolving to become facilitators in information services and gateways to the wider information world. This study aims to investigate teachers' motivation level on the automation system among the teacher-librarians as well as examine perceived usefulness of automation system among the teacher-librarians. The study found that the automation system has captured the teacher-librarians attention on using this system in their school resource center and has ultimately led to increased user satisfaction.

Keywords: Educational resource center, Automation, School resource center, Teachers' perception

1. Introduction

We live in an information age, and libraries as instructional resource centers are expected to use Information and Communication Technologies (ICT) to provide information more expeditiously and exhaustively than before. Computerization of library "housekeeping" operations is an important activity in this context. "Automation," when used in a library or similar environment, refers to the computerization or mechanization of activities (Kumar, 1987; Harinarayana, 1991).

Automation is an essential technology today. It is crucial that school library changes its role and upgrades it to comply with the new demands of new information programmes. Singh (1996) emphasized for library to change its role because school libraries today are no longer the traditional reading rooms and study halls; they are evolving to become facilitators in information services and gateways to the wider information world.

The School Resource Centre (SRC), which outlines as an essential element in every school nowadays, has come a long way. The government's educational guidelines were remained continually in focus in organizing the Blueprint. This policy that was intended to please the requirements of the people as well as to promote its cultural, social, economic and political expansion was initially articulated in the Razak Report of 1956¹ and the Educational Act 1961. In

¹ A Malayan educational proposal written in the 1956. Named after the then Education Minister, Tun Abdul Razak, its goal was to reform the education system in Malaya.

addition, it affirmed that potential requirements should be created in the light of these educational purposes in efforts to evaluate present school library condition. Special concentration was rewarded to the universal progress of the school libraries particularly in the smaller as well as the schools in countryside and also to the contribution of such libraries to educational and public development. Through the improvement employment of the suggestions in this Blueprint, it is potential to expand more examples of school libraries or centers of excellence. It can be viewed throughout model, the variety of services and the worth of the contributions that is able to create to excellence education via well-resourced, practically well-organized and sufficiently employed school libraries.

The major dilemma faced by the learners in Malaysia school is the little information literacy between them. This problem occurred due to the unorganized school libraries services. Studies done Kwan (1995), Abdullah (1999), and Yaakob and Omar (2003) discovered that most of the school libraries in Malaysia which is recognized as School Resource Centers (SRCs) were found to be extremely poorly in the operation of the resources and not administrate by qualified employees.

Nowadays, automation is a necessary technology. It is vital that school library to transform its function and improve it. The purpose is to fulfill in the company of the novel demands of innovative information programmes. Abdullah and Singh (2000) underlined that nowadays school libraries are no longer using the traditional reading rooms as well as study halls since they are changing to turn out to be facilitators in information services and entrance to the broader information world. Therefore, it is said to be important for library to vary its position.

Majority of the literature that has been issued on library automation centers on big educational libraries or other community libraries (Cline & Sinnot, 1983). There have been fewer attempts that deal with the needs of smaller libraries particularly the school resource centers. This is due to the large amount of primary schools secondary schools established with a sum of 9198 schools compared to only 20 universities in Malaysia (Malaysia, Ministry of Education, 2004). Though, one of the likely causes is due to the late implementation of library automation. According to Swee and Abdullah (2005), it is believed that Malaysia schools had initiated the implementing of library automation in late 1990s contrast to the academic libraries. A study carried out by the Educational Technology Division (Fatimah, 2002) recognized that government schools had started to automate their school library system and the system used. Recently, there was a survey conducted by Swee and Abdullah (2005) on the status of library automation in Malaysian Chinese secondary schools, which comprised the self-governing Chinese secondary schools and the National-type secondary schools. However, there were not much studies were carried out on library automation in non-Chinese government schools and primary schools.

The purpose of this research is to identify teachers' perception about the library automation system in SK Taman Universiti. This study intent to meet the following objectives:

- 1) To identify teachers' motivation level on the automation system among the teacher-librarians.
- 2) To examine perceived usefulness of automation system among the teacher-librarians.

The following research questions are formulated in order to meet the research objectives:

1. What are the overall motivation levels of the teacher-librarians on the automation system?
2. What are the attention levels of the teacher-librarians on the automation system?
3. What are the relevance levels of the teacher-librarians on the automation system?
4. What are the confidence levels of the teacher-librarians on the automation system?
5. What are the satisfaction levels of the teacher-librarians on the automation system?

6. What is the teacher-librarians of the teacher-librarians' on the usefulness of the automation system?

2. Background History of Sk Taman Universiti Resource Center

The resource center of SK Taman Universiti (figure 1) which is located in an urban area in Seri Kembangan was established since this school has its own building in 1994. Now, the SKTU school resource center is around 11 years old. This school resource center plays an important role in teaching and learning process by providing a wide range of services to all users of the students, teachers and school support staff.

2.1 Collections of the Material

So far this year, the collection of books is about 4467 pieces with an annual increase of almost 230 pieces. Most of the books were acquired through purchase. In the meantime, the total collection of teaching aids is 713 including audio tapes, video tapes, games kit, charts, maps, transparencies, slides and other things. Annual Increase of teaching aids is approximately 45 items only. Besides, the school resource center also subscribe to serials of 11 titles while the school received 17 other titles for free. In addition, the library also subscribe to four types of newspapers in Malay and English.



Figure 1. The resource center of SK Taman Universiti

2.2 School Resource Center Staff

The policy and policies of the SK Taman University school resource center are determined by the Main Committee of the school resource center. The Committee is chaired by the School Principal. The school resource center Committee will implement all the policies set by the Main Committee of the school resource center. In addition, the School Resource Center is run by a teacher who served as the Coordinator of the Resource Center. This resource center coordinator is often assisted by a committee of teachers, comprising 25 School Resource Center teachers set by the administrator. Since this school was found, there isn't any library clerk were assigned full-time in the center. When the resource center is open during school hours, the center is entrusted to a total of about 10 librarians on duty by rotation under the care of teachers and also the library teachers to provide services to the school.

3. Methodology

A sample of 20 teachers from Sekolah Kebangsaan Taman Universiti, Seri Kembangan, took part in this study. 11 (55%) of the respondents were male and 9 (45%) were female. 45% of the participant

had the experience of being the teacher-librarian for almost 4-7 years followed by 15% who stated that they have 0-3 years of experience. Only 5% had more than 10 years being a teacher-librarian in the school. A total of 13 teachers (65%) stated that they used the library for the purpose of checking out books and the other 7 teacher (35%) said that they made use of the use of the library for studying purpose.

This study is descriptive in character where the ideas of descriptive learning are to explain occurrences connected with subject population or to approximate certain individuality of the population (Cavana, Delahaye, & Sekaran, 2001). The questionnaires are types of instruments used to gauge the teachers' motivations and perceived usefulness on the school library automation. The instruments used were proposed based on the study questions. Those statements were rated by the respondents using the five point Likert scale (1=never, 2=seldom, 3=sometimes, 4=usually and 5=always). After the research was carried out, a structured questionnaire interview was done with five teachers who are in charge of the school library to support the quantitative results.

4. Results

Item "Are the library staff members helpful and courteous", most of the teachers stated 40% on usually followed by 35% sometimes and 25% always. It shows that library staff members usually helpful and courteous. In the second item "Are the staff members knowledgeable" stated that 40% says usually, 30% sometimes and 30% says always. Third item about "How adequate are the print materials in the library", 40% of the teachers says usually, 30% says sometimes and other 30% says always. For the fourth question "How adequate are the non-print materials in the library", 45% says usually, 35% says always and 25% says sometimes.

Next item is about availability of books and material, 45% of the teachers stated usually followed by 30% stated always and 25% stated sometimes. About the atmosphere in the library, 45% find that atmosphere in the library usually conducive to study and research followed by 30% says sometimes and 25% says always. Then about the seating and lighting, 40% says that seating and lighting usually adequate and 35% says sometimes followed by 25% says always. Then when we ask "Are the library hours adequate", 40% of them say that usually, 30% says always and other 30% says sometimes.

4.1 Research Question 1

What is the overall motivation level of the teacher-librarians on the automation system?

Motivation is essential on teachers' way to success. Motivation is important to ensure that teaching and learning can be successful and fun. Also, they would like to continue to utilize the library in the same way.

Table 1. Mean and standard deviation of teachers' overall motivation level on the library automation system

Motivation	Mean	SD
Attention	3.58	.339
Relevance	3.63	.286
Confidence	3.61	.286
Satisfaction	3.66	.298
Overall	3.62	.143

The outcome of Table 1 as an overall composition in the dimensions of motivation calculated from each dimension presents that the overall mean score for overall motivation is higher than 3.00 which is ($M=3.62$, $SD=.143$). This signifies that teachers had higher motivation on the automation system. Thus, it can be concluded that automating a school recourse center had a great result on teachers' motivation in particular dimensions such as attention, relevance, confidence and satisfaction in particular focus of this study.

4.2 Research Question 2

What are the attention levels of the teacher-librarians on the automation system?

Attention is the first component in the ARCS model. In this, the researcher studies on the teachers' attention level of the automation system among teacher-librarian. This component consists of nine items where teachers rated each items from 1 to 5 using the Likert-scale.

Table 2. Frequency of teachers' attention level on the library automation system

ITEMS	N			Mean	SD
	S/T*	U	A		
Learning in the library will make my students feel excited about my lesson	1 5%	8 40%	11 55%	3.50	.607
Using an automated school library will capture my attention	2 10%	9 45%	9 45%	3.65	.671
The students in my class were curious to use the library facilities	2 10%	8 40%	10 50%	3.60	.681

*. S/T=sometimes, U=usually and A=always

In this, the researchers study on the teachers' attention level in the automation system of school library. This component consists of three items. The table 2 explains that 55 % of the respondents responded that "Learning in the library will always make my students feel excited about my lesson", 5% responded sometimes with the statement. Though, 40% of the respondents strongly stated that "Learning in the library will usually make my students feel excited about my lesson" with ($M=3.50$, $SD=.607$).

4.3 Research Question 3

What are the relevance levels of the teacher-librarians on the automation system?

The other dimension measured in this study was about teachers' view on the relevance of the automation system in achieving their goals. This component is set in seven items, which is referred to how greatly teachers feels on the library automation and is it useful to them. The frequency of each items of in this component is represented in the table below.

In this study, the teachers' view about the relevance of the library automation system was calculated. It is set in four items, which are referred to how greatly the automated school resource center is useful to them. Table 3 represents teachers' views of the library automation system. The teachers believed that "The use of school automation library system will be appropriate in my work" with 45% strongly agree with this statement and only 15% stated sometimes. Besides, teachers believed that "I think I will benefit much if I use an automated school library" with ($M=3.60$, $SD= .681$). Almost 50% of the respondents said always to the statement and 2% stated that they will only benefit from this automated system sometimes. As overall, teachers believe that

the automated library will be useful for them and they are able to relate it with their actual life condition.

Table 3. Frequency of teachers’ “relevance” level on the library automation system

ITEMS	N			Mean	Std. Deviation
	S/T*	U	A		
In my classes, I try to use the library facilities	2 10%	9 45%	9 45%	3.65	.671
I think I will benefit much if I use an automated school library system	2 10%	8 40%	10 50%	3.60	.681
The benefits of school automation library are clear to me	2 10%	8 40%	10 50%	3.60	.681
The use of school automation library will be appropriate in my work	3 15%	8 40%	9 45%	3.70	.733

*. S/T=sometimes, U=usually and A=always

4.4 Research Question 4

What are the confidence levels of the teacher-librarians on the automation system?

The third dimension in this study which is on teachers’ motivation was performed based on their confidence on the library automation system. This refers to the teachers beliefs or else confident to manage the school recourse center.

Table 4. Frequency of teachers’ “confidence” level on the library automation system

ITEMS	N			Mean	SD
	S/T*	U	A		
I feel confident that I would do well in my teaching lesson	1 5%	9 45%	10 50%	3.55	.605
I will be very lucky if I can make use of the automation system in my academic work	3 15%	7 35%	10 50%	3.65	.745
With automation system, it would be easy for me to allocate the books that I need	1 5%	9 45%	10 50%	3.55	.605
I always concentrate while in the class	2 10%	10 50%	8 40%	3.70	.657
I believe that I can succeed in my academic work if I try hard enough	3 15%	8 40%	9 45%	3.70	.733
I found that the challenge level of a school that has automated their library is moderate	1 5%	8 40%	11 55%	3.50	.607

*. S/T=sometimes, U=usually and A=always

Table 4 shows that teachers affirmed that “I believe that I can succeed in my academic work if I try hard enough” by ($M= 3.70, SD=.733$). It portrayed that 45% of the respondents answered always to the statement and only 40% said that they only can success in their academic work usually followed by 15% who stated that they only believe that they can succeed sometimes. The respondents in this study also declared that making use of the automated system permits them to get instant response of their references. 50% of respondents said that they always could get immediate feedbacks of their reference finding when they used they automated system and only 5% responded sometimes with ($M=3.55, SD=.605$).

4.5 Research Question 5

What are the satisfaction levels of the teacher-librarians on the automation system?

Teachers’ satisfaction on the automation school library system is the last dimension of motivation in this study. It refers to teachers fulfilled desire, needs and expectation when the automation system is set up in school. Table 5 shows the frequency of nine items that was stated in the satisfaction component.

Table 5. Frequency of teachers’ “satisfaction” level on the library automation system

ITEMS	N			Mean	SD
	ST	U	A		
I need not work hard to find my reference books if the school has an automated system	5%	40%	55%	3.50	.670
I feel that using an automated library will give teachers and students a lot of satisfaction system in my academic work	20%	35%	45%	3.75	.786
I feel that I will receive good feedbacks from students when I make use of the library facilities	15%	50%	35%	3.80	.696
I enjoy teaching when I use library facilitates	10%	40%	50%	3.60	.681
I felt rather satisfied with school automated library	10%	40%	50%	3.65	.671
I feel that I will get enough recognition from the school automation library in my work by using the appropriate automation software	15%	35%	50%	3.65	.745

Table 5 shows the frequency of six items that was stated in the satisfaction stage. As revealed in the above table, the teachers answered to “I need not work hard to find my reference books if the school has an automated system” by ($M=3.50, SD=.670$) which means that 55% believed that they they need not work hard to find their reference books followed by 40% of the teachers who stated usually to the statement. Therefore, by this teachers can slowly increase their confidence making use of the library without force. With the use of computers, teachers are able to reduce their workload allowed since they receive responses through computer directly.

4.6 Research Question 6

What is the teacher-librarians of the teacher-librarians’ on the usefulness of the automation system?

In this study, six items were used to compute teachers’ perception on the library automation system. The word usefulness in this study is defined as the level of efficiency of system in managing the school library.

Table 6. Frequency of teachers' perceive usefulness on the library automation system

ITEMS	N			Mean	SD
	ST	U	A		
Using school library automation in my academic work would enable me to accomplish my task more quickly	55%	35%	10%	3.55	.686
Using school library automation would improve my teaching skills in class	45%	50%	25%	3.60	.598
Using school library automation in my academic work would increase my attitude towards students	45%	50%	5%	3.60	.598
Using school library automation would enhance my effectiveness in the class	40%	50%	10%	3.70	.657
Using school library automation in my academic work would make it easier to do my job	45%	40%	15%	3.70	.733
Overall, I find school library automation is useful in my academic work	55%	40%	5%	3.50	.607

Table 6 shows the frequency of teachers' perceives usefulness of the library automation system. In the above table, the teachers answered to "Using school library automation in my academic work would enable me to accomplish my task more quickly" stated that 55% believed sometimes by using school library automation in their academic work would enable them to accomplish their task more quickly followed by 35% of the teachers who stated usually to the statement and 10% always. Second item, half of the teachers says that by using school library automation usually improve their teaching skills in class. On third item, they also believed that by using school library automation in their academic work usually would increase their attitude towards students. In fourth item, the teachers also say that by using library automation usually enhance their effectiveness in the class. Fifth item stated that the teachers says by using school library automation in their academic work sometimes make it easier to do their job. Last item is about their perceived of usefulness on the school library automation system, 55% of them says that sometimes school library automation system is useful in their academic work.

4.7 Analysis of the Interview Questions

For interview question, 5 questions were asked involving 5 teachers at that school regarding on the school library. The first question is about "*Why students need to use school library?*" Most of the teachers say that student needs to use school library for the best environment to study. It is because school library are considered one of the most important resources within educational facilities. Some of them also said that school library is the most important unit as storage of information for the purpose of teaching and learning. It also helps students broaden their views and strengthen their personal values.

Since the school doesn't have an automation system, we asked the teachers a little bit about school automation, "*What are the benefits of school library automation?*" Most of them said that an automated library helps administrators complete accreditation requirements for the school. Parents can feel good about the school library being available to their students anytime the students want to access it via a Web browser. Everyone benefits when the school library is automated. They also said the benefits of school library automation are easily searching of information, time saving, helpful in stock verification, easily working with the help of automation and helpful in resource sharing

Third question is about activities that student can do in school library. The teacher said that student can do a lot of activities at school library like borrowing books, reading books, having a discussion

and also completing the task that given by teacher. Besides book, they also have magazine and newspaper for student to read.

The fourth question is about the impacts of automation system on the teacher-librarians in their school. Most of them said the teacher-librarian have to work together with the library technician as a team to make staff and students knowledgeable about resources in the library. Teacher-librarians then must spend most of their time with clerical duties and they do not have sufficient time to spend working with teachers and students.

The last question is about problem that faced by teacher-librarian in relation to using automation system. The challenge is to make everybody know about automation system. It's hard for the teacher to learn the system then do training not only for student to learn about automation system but also to the teachers. It is because the automation system is a long term and time consuming process and need staff training is required for it.

5. Conclusion

As the whole, it is found that the automation system has captured the teacher-librarians attention on using this system in their school resource center and has ultimately led to increased user satisfaction. Even though the school has not implemented in using this system, most of the teachers felt that with this system, they may help the administrator of the school in extending resource center services, enhanced the prestige of the school resource as well helping in resource sharing through networking. The impact of automation system on library is fairly clear as it has formed novel types of work and changed conventional organizational structure into new institutional organization.

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