

## AN ASSESSMENT OF THE INFORMATION LITERACY LEVELS OF LIBRARY AND MEDIA TEACHERS IN THE HULU LANGAT DISTRICT, MALAYSIA

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### ABSTRACT

*Information literacy has become an important element in education today. The responsibility for information literacy instruction in schools is usually entrusted to the library media teachers. The quality of this instruction depends, in part, on the capability of these teachers. How knowledgeable are these library media teachers themselves in information literacy? This was the central research question in the study. A questionnaire-based survey was carried out among a sample of the library media teachers in the Hulu Langat district of Malaysia. Of the 132 questionnaires sent out, 84 were returned, giving a return rate of 63.6%. The findings from the survey indicate that the level of information literacy among the respondents was in the 'average' to 'poor' range. This may partly be due to the finding that 59.5% of the teachers had not attended any courses on information literacy, and 81% felt they needed more training in the area. It was surprising to learn that 61.9% did not teach information literacy in their school resource centers. This could be due to a lack of a curriculum resources, as 63.1% of them wanted for a framework for teachers. In general, the respondents rated their own information literacy skills as being average or poor, and even rated their own technology skills as being average or poor. They were however satisfied with the support received from the school, administrators, and the Teachers' Activity Centers. The findings from this study suggest that the library and media teachers are keen to see information literacy implemented, but they themselves may lack the necessary understanding and skills to do so.*

**Keywords:** Information literacy, Information Literacy Assessment, Library Media Teachers, School Resource Centers; School libraries

### INTRODUCTION

Information literacy has become an important element in education today. With increasing amounts of information, brought about in part by developments in technology for producing, organizing, storing and accessing information, and the increasing importance of information in personal and professional life, there is a need to know when and why information is needed, where to find it, and how to evaluate, use and communicate it in an ethical manner (CILIP 2004), i.e. to be information literate. Information literacy is a set of skills needed to find, retrieve, analyze, and use information. In an information-oriented environment, a person needs to be able to recognize the need for information, be aware of the resources available, know how to find the information, evaluate the results, work with or exploit the results, use, communicate or share the information responsibly and ethically.

However, these skills are not innate in us; they have to be learned. The most appropriate place for learning information literacy is the school as the children are in their formative years, they represent a captive audience, and there is an opportunity for structured



learning experiences. In many schools, the responsibility of imparting these skills is assigned to one or more of the teachers who manage the library. This practice has been emphasized by many authors, including Eisenberg (2002) who believed that libraries and the library media teachers should be right in the middle, working in partnership with classroom teachers, administrators, and the community to ensure that students are effective users of ideas and information. The American Library Association and Association for Educational Communications and Technology (1998) affirmed the roles and responsibilities of library and media teachers as teachers, instructional partners, information specialists and program administrators. As information specialists, the library and media teachers should be able to provide expertise in acquiring and evaluating information resources in all formats, as well as able to educate students to locate, access, and evaluate information within and beyond the library media resource centre. The recently released American Association of School Librarians *Standards for the 21st Century Learner* (2007) also emphasizes the foundational belief that school libraries are essential to the development of learning skills.

Traditionally, a school library, or school resource centre as it is known in Malaysia, was a centralized collection of books, a story-telling place, and reading or a multi-media room. With the transformation into the information era, the school resource centre began transforming itself into a focal point for information. The school resource centre in Malaysia today is generally managed by teacher-librarians, or *library and media teachers* – the new official term used in Malaysia. Beginning in 2006, the Government has started appointing qualified teachers as library and media teachers in all schools, and these teachers were given a reduced teaching load so as to enable them to manage the school resource center. They are expected to function as library managers, as well as information managers to provide information needed by their students. They are also expected to help the students become information literate.

But are the library media teachers equipped to play the role of instructors of information literacy? Are they themselves information literate? Do they have the knowledge, skills and support to develop information literacy among their students? These were the questions that needed to be explored.

### **Background to the study**

A study by the Educational Technology Division of the Malaysian Ministry of Education (2005) showed that 76.2% of media teachers were aware of the concept of information literacy. However, 60% of them said that they had not been exposed or trained in information literacy. Furthermore, the time allocated for implementing information literacy in most schools was limited to less than 10% of the teachers' teaching time. The same research study showed that almost 70% of all the respondents had not been exposed and trained in information literacy through courses, seminars or other structured staff development programmes. These results present a challenge as the library and media teachers are expected to play a key role to assist, provide and teach information literacy skills in schools. Were they information literate themselves and capable of playing this role of teaching information literacy? This was the central question that led to a need to find out how much the library and media teachers know about information literacy.



### **Objectives of the study**

The main objective of this study was to investigate the current state of information literacy skills among Library and Media Teachers in Malaysia. This was considered important as the library and media teachers are expected to shoulder a heavy responsibility of producing information literate students. It is important that they themselves be information literate and are adequately prepare to carry out the responsibilities.

The study focused on three main areas:

- a. Are the library and media teachers information literate?
- b. Are the library and media teachers in need for further information literacy skills?
- c. Is the support for information literacy received by the library and media teachers adequate?

### **Significance of the study**

This study is significant for a number of reasons. It would first be able to identify the information literacy skills among library and media teachers. This research would provide a snapshot of the knowledge and levels of information literacy, as well as information on the current needs of these teachers. This research will also determine whether the library and media teachers needed any further information literacy programs or training. At the same time, this research will help to provide significant feedback of library and media teachers' information literacy skills and implementation to the Ministry of Education. The Ministry has been making considerable efforts and providing substantial resources for the development of information literacy in the schools. This study will provide some information on whether there is a need for additional resources or a change of strategy. In addition, the study will also provide baseline data for future studies.

### **Scope of the study**

This research was limited to a sample of library and media teachers from the Hulu Langat district in Selangor, Malaysia. Selangor is a large state, and the Hulu Langat district comprises both urban and rural areas, and is thus fairly reflective of the variation in the country. For this purpose, this research targeted 132 library and media teachers from 85 primary schools, 36 secondary schools and 11 private schools. The primary schools included 13 national primary schools (SK), 15 Chinese national schools (SKJKC) and 7 Tamil national schools (SKJKT). The secondary schools include 33 secondary national schools (SMK), 1 secondary national type (SMJK) school, 1 technical secondary school, 1 fully residential school and 1 federal religious secondary school (SMAP).

The study also focused on the library and media teachers' information literacy skills and the implementation of the information literacy programs only.

### **Limitations of the Study**

This investigation was based on self-reporting by library and media teachers themselves. The findings were corroborated by informal interviews, but there was no formal testing done on the teachers. The results of the study should thus be interpreted accordingly.



## REVIEW OF LITERATURE

The concept of information literacy is believed to have been first introduced by Paul Zurkowski, the then President of the Information Industry Association in 1974. He introduced the concept as people trained in application resources to their work (Spitzer, Eisenberg & Lowe 1998).

Later in 1976, Burchinal stated that in order to be information literate, people needed a new set of skills, including how to locate and use information efficiently and effectively to solve problems and make decisions. An often quoted definition of information literacy is that put forward by the American Library Association Presidential Committee on Information Literacy (January 10, 1989, Washington, D.C.), which said that "Ultimately, information literate people are those who have learned how to learn. They know how to learn because they know how knowledge is organized, how to find information, and how to use information in such a way that others can learn from them. They are people prepared for lifelong learning, because they can always find the information needed for any task or decision at hand."

UNESCO's Information for All Programme (IFAP), based on Alexandria Proclamation 2005, more recently defined information literacy as the capacity of people to:

- Recognise their information needs;
- Locate and evaluate the quality of information;
- Store and retrieve information;
- Make effective and ethical use of information, and
- Apply information to create and communicate knowledge.

(Catts & Lau 2008)

Over the years, the concept has become increasingly important, especially with the proliferation of information, and the means for storing, organizing and accessing it. Today, information literacy is considered to be an important element in education.

Research has shown that information literacy in school resource centre can make a difference in students' achievement in school. Lance's (2001) studies on the impact of school library media centre programs on the academic achievement in schools in four states in the United States have shown that that trained and credentialed school library media teachers did make a difference in student performance on achievement tests. The library and media teacher had to play dual role, as a teacher to facilitate the information literacy skills as well as in-service trainers of teachers.

Todd, Kuhlthau and OELMA, (2004) in their *Student Learning Through Ohio School Libraries* study showed that 99.44% of the students (13,050 students in grade 3 to 12) indicated that the school library and its services, collectively with the roles of school librarians, had helped them with their learning. This showed that school library played a key role in students' learning, as well as an important place for students to develop their information competencies by providing them with multiple opportunities to learn with information.

Information literacy should start from the school as students learn and acquire skills at the learning stage. According to Ranaweera (2008), students need to be educated with abilities and skills of how to learn, or learning to learn, by developing the aspects of reasoning and critical thinking. Information literacy skills would help students to achieve this target. He also stressed that we assumed they would gain information literacy



automatically by themselves, but the fact was information literacy skills needed to be inculcated among students by teachers and librarians. This is where library and media teachers play their role as an information agent.

In Malaysia, Chan (2002) found that “the understandings and skills that form information literacy have yet to be set in into the classroom practices of teachers, the outcomes of the education in the Information and Communications Age, and the Malaysian educational system”. Information literacy has yet to become a part of the general curriculum. The Malaysian Smart School Conceptual Blueprint discusses the use of information literacy as contributing towards personal empowerment and the students’ freedom to learn. As a result, she saw this as an opportunity for media teachers to implement the goals and objectives of information literacy in schools.

However, in order to develop information literacy among students, it is a necessary prerequisite that library and teachers themselves be information literate and have the resources to teach information literacy.

## **METHODOLOGY**

This study used a questionnaire-based survey as the means for gathering data. The questionnaire was developed based on instruments that had been used in other related studies in the past. The questionnaire comprised four sections, viz. questions on demography of respondents, knowledge of information literacy, information literacy skills, and the information literacy programs in schools.

A pilot test of the draft questionnaire was carried out among ten library and media teachers. Their comments and constructive ideas were taken into consideration to improve on the questionnaires. The questionnaires were sent out to a sample of 132 library and media teachers in the Hulu Langat district with the co-operation of Kajang Teacher Activities Centre and the District Education Office. This was followed up by telephone calls and e-mails to remind them to respond. The data was entered into a spreadsheet and SPSS software was used to analyze the data.

## **FINDINGS**

A total 132 questionnaires were sent out to the Library and Media Teachers in Hulu Langat District, of these 84 replied, giving a return rate of 63.6%.

Of these 84 respondents, 85.7% of them were full-time library and media teachers in schools and the rest were replacements for the library and media teachers, as some of the teachers were on leave, or attending in service courses, etc. Of the respondents, 86.9% of the library and media teachers were women and 13.1% were men, a fact fairly reflective of the teaching population in Malaysia which is predominantly female. Their teaching experiences ranged from 1 year to 28 years, with a mean of 11.4 years. Thus the respondents could be considered as fairly experienced as teachers. The experience as library and media teachers ranged from 0 to 14 years, with a mean of 4.1 years. Thus in terms of library management experience, they were relatively new.

In terms of academic qualifications, 4.8% of the library and media teachers had a Masters degree, 45.2% had a Bachelor’s degree, 32.1% had Diplomas, 9.5% had an HSC/STPM qualification, and 8.3% had MCE/SPM as their academic qualifications. In



addition of their academic qualifications, 41.7% of them had teaching certificates and 58.3% had a Diploma in Education. This indicated that all the library and media teachers were academically qualified and professionally trained as teachers

In terms of library qualifications, 16.7% were without any school resource centre management training while 36.9% of them attended the basic 35-hour School Resource Centre Basic Management Course and 17.9% of them attended the 45-hour School Resource Advanced Management Course. Another 23.8% of them had the 14-week in-service School Resource Center Management Course. There were also 2.4% who had attended a one-year Diploma in School Resource Centre Management Course, and 1.2% who had a Masters degree, either Library and Information Science or Educational Technology, while 1.2% had other qualifications. It is heartening to note that at least 83.3% of the library and media teachers had some form of training in library science knowledge, even though almost half of those trained had very basic training only.

The analysis also showed that 59.52% of the library and media teachers had not attended any information literacy courses. Further, 81.0% of them stated that they needed information literacy courses, programs or workshops as these training programs could help them to be more competent and resourceful to manage the school resource center. This finding was supported by the fact that 72.6% of them requested the Teachers' Activities Centre to conduct more in-depth information literacy courses. A very large majority (89.3%) of them stated that they needed information literacy programs in their school resource centers. They also needed the knowledge of information literacy skills to be able to practice, as well as to teach the students how to locate information.

This study also found that 61.9% of the respondents indicated they did not teach information literacy skills in their school resource centers. It was also found that 81.0% of the respondents indicated that no one was teaching information literacy in their respective schools. Where it was not the library media teacher who was teaching information literacy, it was either a language teacher, a local studies teacher, a technology teacher, or someone else. Some of them were confused whether they were supposed to teach information literacy, or someone else. They also indicated that time for teaching information literacy skills were not allocated in their school timetable. They were uncertain whether to teach information literacy as a subject, or whether it should be integrated into their teaching subjects. They wanted to know if the information literacy was to be implemented into the school syllabus. A total of 63.1% agreed that there was a need for the Ministry of Education to develop an information literacy framework for the library media teachers, and 50% for students, as shown in Table 1. However, the findings also suggest that they wanted some level of freedom, as a majority of them disagreed on the need for specific standards and scheme of work.

Table 1: Need for Information Literacy Guidelines

Information Literacy Guidelines	Level of Agreement on Need	
	Agree	Disagree
Information literacy framework for library and media teachers	63.1%	36.9%
Information literacy standard for library and media teachers	38.1%	61.9%
Information literacy scheme of work for library and media teachers	48.81%	51.19%
Information literacy framework for students	50.0%	50.0%



This research also found that 92.9% had never conducted any research, review or assessments to measure the outcomes of their information literacy programs. This is not surprising, as a large majority had indicated earlier that they did not teach information literacy.

To assess the levels of information literacy, the respondents were asked to rate their perceived levels of 12 information literacy skills, based on the Ministry of Education (2005) survey. The distribution of responses is as shown in Table 2.

It can be seen from Table 2 that most of them rated their skills as average, with very few rating them as being excellent.

Table 2: Information Literacy Skills of Respondents

Information Literacy Skill	Percentage of Respondents				
	Excellent	Good	Average	Poor	Did not know at all
Recognize needed information	1.2%	17.9%	45.2%	31.0%	4.8%
Identify needed information skills	1.2%	13.1%	44.0%	36.90%	4.8%
Identify source of information skills	1.2%	16.7%	46.4%	31.0%	4.8%
Locate information efficiently and effectively.	0%	20.2%	41.7%	34.5%	3.6%
Use information efficiently and effectively.	0%	21.4%	39.3%	34.5%	4.8%
Evaluate information critically	0%	27.4%	47.6%	21.4%	3.6%
Plan and integrate information into knowledge	1.2%	21.4%	52.4%	20.2%	4.8%
Use information ethically and lawfully	1.2%	17.9%	52.4%	23.8%	4.8%
Use information to communicate	2.4%	17.9%	58.3%	16.7%	4.8%
Integrate new information into new knowledge	0%	21.4%	57.1%	16.7%	4.8%
Use information critically to solve problems	0%	26.2%	53.6%	16.7%	3.6%
Carry out all the activities stated above	1.2%	20.2%	52.4%	23.8%	2.4%

An analysis of the mean scores for each of the 12 skills (based on a scale of 1 to 5, where 1 represented 'excellent', and 5 represented 'did not know at all') showed that the mean in 11 of the skills to be slightly above 3 (i.e. representing 'average' to 'poor'), except for the ability to use information critically to solve problems (Table 3).

These lower than expected abilities are a little surprising, as most had had some basic training in school resource center management. It would have been expected that they should be more confident with information literacy skills as part of their expertise.

Technology plays an important role in information literacy. While it is not an absolute necessity, technology can help in the accessing and retrieval of information. In the study, the respondents were also asked to rate their own basic computer and technology skills. The results are presented in Table 4.



Table 3: Mean Scores for Information Literacy Skills (n=84)

Information Literacy Skill	Mean Score
Recognize needed information	3.20
Identify needed information	3.31
Identify source of information	3.21
Locate information efficiently and effectively	3.21
Use information efficiently and effectively	3.23
Evaluate information critically	3.01
Plan and Integrate Information into knowledge	3.06
Use information ethically and lawfully	3.13
Use information to communicate	3.04
Carry out all the activities stated above	3.06
Integrate information into new knowledge	3.05
Use information critically to solve problems	2.98

Table 4: Technology and Information Retrieval Skills of Respondents

Technology Skills	Percentage of Respondents				
	Excellent	Good	Average	Poor	Did not know at all
Use Microsoft Office Word	0%	8.3%	35.7%	38.1%	17.9%
Use Microsoft Office Power Point	1.2%	16.7%	39.3%	32.1%	10.7%
Use Microsoft Office Excel	2.4%	27.4%	39.3%	22.6%	8.3%
Use Internet to find information	0%	14.3%	35.7%	40.5%	9.5%
Use databases to find information to find information	6.0%	39.3%	35.7%	13.1%	6.0%
Use search engines to find information	1.2%	16.7%	33.3%	35.7%	13.1%
Use email to communicate with friends or colleagues	4.8%	26.2%	27.4%	32.1%	9.5%
Retrieve information in electronic format	8.3%	36.9%	21.1%	23.8%	7.1%
Retrieve information in print format	6.0%	19.0%	38.1%	26.2%	10.7%
Recognized prejudice, deception or manipulation in websites.	13.1%	51.2%	20.2%	13.1%	2.4%

The results of this section are also surprising as the skills were also lacking. Most of them rated their abilities as either average or poor. Although, the use of a word processing software package is a common tool to produce documents among teachers, yet surprisingly more than 90% rated their skills as average or below, as shown in Table 4. Even the use of Internet to find information was rated as average and below by 85.7% of the respondents. It was heartening to note however that in the skill to recognize



prejudice, deception or manipulation in websites, 51.2% of the respondents placed their ability as good.

An analysis of the mean scores of the above skills, as shown in the following Table 5, also reflected the distribution above.

Table 5: Mean Scores for Technology and Information Retrieval Skills (n=84)

Technology and Information Retrieval Skill	Mean Score
Use Microsoft Office Word	3.35
Use Microsoft Office Power Point	3.65
Use Microsoft Office Excel	3.07
Use Internet find information	3.45
Use databases to find information	2.74
Use search engines to find information	3.43
Use e-mail to communicate with your colleagues or friends	3.15
Retrieve information in printed format	3.17
Retrieve information in electronic format	2.85
Recognize prejudice, deception, or manipulation in a Web site.	2.40

Again, most of the scores ranged from 'average' to 'poor'. The surprisingly relatively higher score in recognizing prejudice, deception, or manipulation may be due to the critical thinking element that has been emphasized in many of the teachers' in-service courses.

In the implementation of information literacy, the Ministry of Education tries to provide much support through its institutions such as the Teachers Activity Centers, and the school itself. The respondents were asked to rate the level of satisfaction with the support being provided. The results are shown in Table 6 below.

Table 6: Satisfaction with Support for Information Literacy

Source of Support	Level of Satisfaction				
	Very satisfied	Satisfied	Neutral	Dissatisfied	Very dissatisfied
Support from teachers in school	4.8%	50.0%	26.2%	19.0%	0%
Support from the school management	6.0%	50.0%	33.3%	6.0%	4.8%
Support from Teachers' Activities Centers	7.1%	64.3%	25.0%	2.40%	1.2%

From Table 6, it can be seen that the respondents were satisfied with the support from teachers in their school, school management, and the Teachers' Activities Centers.



## CONCLUSIONS AND RECOMMENDATIONS

Based on the findings of the study, the following conclusions can be made. It must be kept in mind that these are based on a small sample, and on self-reporting by the teachers, they should thus be interpreted accordingly.

- a) The sample of library and media teachers surveyed in this study generally perceive themselves to have 'average' to 'poor' levels of information literacy;
- b) This is not surprising as almost 60% of them have not attended any courses or professional development programs on information literacy. However, they are keen to learn, as almost 90% of them want to implement information literacy through their school resource centers, and 81% want to attend courses, programs or workshops on information literacy;
- c) The sample of library and media teachers surveyed also generally perceive themselves to have 'average' to 'poor' levels of technology skills and information retrieval skills;
- d) Nevertheless they are satisfied with the support received from the Teachers Activity Centers, and from the school, although they would like to have more guidelines on the implementation of information literacy.

The findings suggest that the library and media teachers' information literacy skills need to be improved. The training on school resource center management received by these teachers is probably inadequate. There is a need for further training and support, although a detailed study of their actual skills needs to be carried out first. One of the ways this can be done is through an information literacy assessment tool designed to suit the local education system. It is important that information literacy be seen as an integrated approach towards better student learning, and not just another isolated effort to introduce another set of skills. More studies also need to be carried out on the readiness, capabilities, challenges, and support needed for the implementation of information literacy. Library and media teachers should become role models for integrating information literacy, and eventually all teachers should integrate information literacy into the teaching and learning activities.

The efforts of the Ministry of Education, and their State, District and local level offices, are commendable and acknowledged, but more needs to be done. There is a need for clear guidelines on the implementation of information literacy, and the responsibilities should be clearly spelled out and made known to the teachers. The library and media teachers need to be adequately trained, and provided with the necessary support. This is important if the school resource centers are to transform themselves into focal points of information centers. In the long run, this is necessary to start building a strong information literacy foundation from the early school years continuing on to university level. This is a necessary step towards building an information literate society, and nation.

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