

**INFORMATION LITERACY PRACTICES BY TEACHER-LIBRARIANS: A CASE OF FOUR MARA JUNIOR SCIENCE COLLEGES IN KEDAH, MALAYSIA**

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**ABSTRACT**

*This paper discusses the results of a study carried out at four selected MARA Junior Science Colleges (MJSC) in Kedah, Malaysia. It focuses on teachers' perception on information literacy practices by teacher-librarians or library media teachers. MJSCs are boarding secondary schools managed by Majlis Amanah Rakyat (MARA), a statutory body in Malaysia that run 42 MJSCs nation-wide and employs a teacher-librarian or library media teacher at each MJSC. Teacher-librarians only teach seven hours per week and spend most of their working hours managing their school resource centres. The objectives of this study are: to identify the perception of MJSC teachers on the roles of teacher-librarians; to find out the practices of information literacy by teacher-librarians in the schools; and to identify the collaborative effort that are being practiced between teachers and teacher-librarians. Respondents are school teachers from four MJSCs in Kedah who are teaching various subjects. The instrument used was adapted from a questionnaire developed by the Council on Teacher Education (C.O.T.E) (2003). From 200 questionnaires distributed, 157 questionnaires were returned. About 47.8% of the teachers were unsure about information literacy. Many respondents admitted that teacher-librarians have been performing the roles very well but they are unsure of the roles of the teacher-librarians.*

**Keywords:** Teacher-Librarians; School resource centres; Teachers' perception; Malaysia

**INTRODUCTION**

The roles of teacher-librarians or library media teachers are very important in every schools. They are information experts who can help in developing information literacy skills among students by cooperating with the school teachers. The Association of Teacher-Librarianship of Canada (1998) pointed out that the role of the teacher-librarian in the 21st century is to provide leadership in collaborative program planning and teaching to ensure both

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physical and intellectual access to information and commitment to voluntarily reading. The roles of the teacher-librarian do not only focus on students, but also include helping school teachers in the learning process and lesson planning.

School teachers cannot limit their sources of information to textbooks only. An innovative approach, termed “*resource-based learning*,” was introduced into the school resource centre literature which highlights that instruction must provide access to a variety of media formats and technologies (Hurray, 2000). There are many sources that can be used as lesson tools, either in paper or electronic format. Lesson planning involves teachers interpreting and transforming a significant range of information to specific learning exercises, schedules, teaching and learning resources, means to control the class, and learning objectives (Tanni, 2008).

In order to implement lifelong learning among students, teacher-librarians should perform information literacy instructions in their schools in collaboration with school teachers in lesson planning (Intan & Shaheen, 2006). This is also consistent with The American Association of School Librarians Standards for the 21st century in which Leaner (2007) mentioned that school libraries are essential to the development of information literacy and learning skills. However, are teacher-librarians capable and competent to undertake their roles in the delivery of information literacy skills? Do all school teachers realize and understand the role of teacher-librarians? What are the teachers’ perceptions towards the role of teacher-librarians?

### **INFORMATION LITERACY AND TEACHER-LIBRARIAN**

The creation of an information society is key to the social, cultural, and economic development of nations and communities, institutions and individuals in the 21st century and beyond. NCLIS consultant, Horton (2003), summarized these concerns by saying, “in our emerging Information Society, information itself is becoming the strategic transforming resource of society ... this is the reason why information literacy is so important, because, without it, the information society will never be able to rise to its full potential and will remain, instead, only an unrealized dream” (Horton, 2003).

Information literacy can be defined as the ability to access, evaluate, organize and use information from various sources (Nor Fariza & Azizah, 2009). According to the American Library Association Presidential Committee on Information Literacy (1989), 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 (ALA, 2000). As an important aspect, information literacy skills are essential in developing the information

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society (Mohd Sharif & Edzan, 2005). As we know, information is used at all times by all levels of society, in schools, in offices, in businesses, including daily activities. Thus, information literacy needs to develop in the context of school reforms, restructuring, assessment, and national goals. Information literacy is a prerequisite for participating effectively in an information society.

A teacher-librarian, as an information expert, plays an important role in passing information literacy skills to teachers and students, since they themselves are sources of information. A teacher-librarian's responsibilities include developing teachers' information literacy skills in order to help in the instructional and teaching processes and this have been identified as a need for information, the knowledge of the resources available, how to find information, the need to evaluate results, how to work with or exploit results, ethics and responsibility of use and how to communicate or share findings (CILIP, 2006). Collaboration between school teachers and teacher-librarians is something that is very welcoming because it can give many advantages to the students and school itself. This statement was agreed by Montiel (2009) who mentioned that students' academic performance improved when teacher-librarians cooperated with teachers in planning instruction, identifying materials, teaching information literacy skills, and providing in-service training to teachers. This is an opportunity for the school teachers to develop an understanding of information literacy.

In Malaysia, the Malaysian Smart School Conceptual Blueprint discusses the use of information literacy as contributing towards personal empowerment and the students' freedom to learn and, this is an opportunity for teacher-librarians to implement the goals and objectives of information literacy in schools (Tan & Diljit Singh, 2008). Chan (2002) mentioned that when school teachers understand and use the information literacy skills in the class, the outcomes of the education in the Information and Communications Age, and the Malaysian educational system will improve clearly. Each MJSC has a teacher-librarian that has a qualification in library science. He/she has minimal teaching hours with the majority of the working hours dedicated to the school resource centre. A review of the literature also revealed that in order to perform their roles effectively, teacher-librarians need to have appropriate knowledge and skills which could be gained from professional education and training in librarianship.

Information literacy is highly significant to the MARA Junior Science College (MJSC). As an elite boarding school, it has achieved excellent results in the Sijil Pelajaran Malaysia (SPM) examination since its inception in 1970. Apart from its academic excellence, MJSC also aims to produce all well rounded individuals who are competent in any task given, innovative, creative, possess entrepreneur skills, are future leaders and all these are among the characteristics of an

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information literate person. As interpreted by Hancock (2003), information literate students are more critical when they make decisions and are more effective consumers of information resources. The roles of teacher-librarians are therefore very important in every school in developing information literate students.

### **BACKGROUND AND METHODOLOGY**

Maktab Rendah Sains MARA or MARA Junior Science Colleges (MJSC) are boarding schools built by Majlis Amanah Rakyat (MARA) in almost every state in Malaysia. MARA is a statutory body with its own financial system to help ensure the success of education and the development of Bumiputeras. The first MJSC was established in 1966 in Seremban as an effort to achieve the goal of MARA in training and education. There are 42 MJSCs nationwide. 38 in peninsular Malaysia while the remaining four are in Sabah and Sarawak. In this study, four MJSCs had been selected and they are MJSC Merbok, MJSC Pendang, MJSC Kulim and MJSC Kubang Pasu. MJSCs pride itself in innovative curricular experimentation drawn from the best practices of schools, particularly those of the United States of America. Each school is well endowed with state-of-the-art classrooms, laboratories and school resource centers. This research was limited to a sample of school teachers from selected MJSCs in Kedah only. Each MJSC are divided into four departments that are:

1. Department of Social Science
2. Department of Science
3. Department of Language
4. Department of Mathematics

The quantitative method has been chosen for this research since it is confirmatory rather than exploratory (Audience Dialogue, 2006). A questionnaire was developed with the aim of collecting data. The questionnaire was designed by adapting questionnaires developed by Council on Teacher Education (C.O.T.E., 2003) and several previous research related to this topic. Among them was the questionnaire developed by McDonald (2006) in his research on “*The Role of Technology in Interactions between Secondary School Library Media Specialists and Teachers*”. The questionnaire was modified in order to suit this study.

The questionnaire consisted of six pages in four sections. They are: Section A: Roles of Teacher-Librarians; Section B: Practices of Information Literacy; Section C: Collaboration of Teachers and Teacher-Librarians; and section D: Demographics. A pilot study was conducted and the questionnaire was distributed to 15 teachers at a secondary school in Kedah. Finally, the questionnaire was distributed to 200 respondents from four selected MJSCs.

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However, only 157 were returned and processed. Analysis was done using Statistical Package for Social Science (SPSS) version 17.0 for Windows.

#### **FINDINGS AND DISCUSSION**

From 157 respondents, 43 (27.4 %) respondents were from MJSC Pendang and MJSC Kubang Pasu, 41 (26.1%) from MJSC Kulim followed by MJSC Merbok which comprised 30 (19.1%) (Table 1). The majority of respondents (92, 58.6%) are female teachers and the rest (65, 41.4%) male. The findings also indicate that the majority of respondents (153, 97.5%) has a Bachelor's degree while four respondents (2.5%) possess a Master's degree. The majority of them (77, 49%) are below 29 years old, followed by 56 respondents (35.7%) between 30 to 39 years, while 24 respondents (15.3%) are between 40 to 49 years. About 18 (11.5%) respondents teach physics, followed by chemistry and general science 17 (10.8%). English teachers totaled 16 (10.2%) respondents, followed by 15 (9.6%) respondents teaching Islamic Education, while 14 (8.9%) respondents are teaching Mathematics, and the rest are art teachers 9 (5.7%).

Table 1: Demographic of respondents

<b>Demographic</b>	<b>Frequency</b>	<b>%</b>
<b>Name of School</b>		
MRSM Merbok	30	19.1
MRSM Pendang	43	27.4
MRSM Kulim	41	26.1
MRSM Kubang Pasu	43	27.4
<b>TOTAL</b>	<b>157</b>	<b>100</b>
<b>Gender</b>		
Male	65	41.4
Female	92	58.6
<b>TOTAL</b>	<b>157</b>	<b>100</b>
<b>Age</b>		
Below 29 years	77	49
30 to 39 years	56	35.7
40 to 49 years	24	15.3
<b>TOTAL</b>	<b>157</b>	<b>100</b>
<b>Level of Education</b>		
Bachelor's Degree	153	97.5
Master's Degree	4	2.5
<b>TOTAL</b>	<b>157</b>	<b>100%</b>

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### **THE ROLES OF TEACHER-LIBRARIANS IN INFORMATION LITERACY**

This set of questionnaire consists of questions on the role of teacher-librarians. The ten questions include level of respondents' understanding on the roles of teacher-librarians, respondents' perception on the ability and skills of teacher-librarians, what teacher-librarians do to support teachers and students such as participation in school and curriculum development and consultations with teachers in seeking information for lesson plans, and respondents' perception on the importance of teacher-librarians within the school system.

The findings (Table 2) show that the highest response (69, 43.9%) from respondents agreed that teacher-librarians have the ability to apply appropriate standards and guidelines to develop and evaluate the school library collections and services. The findings also showed that many of the respondents (75, 47.8%) agreed on the role of teacher-librarians is to assist students in identifying and assessing information in the school. Only 12 (7.6%) respondents strongly disagree. Most of the respondents (72, 45.9%) agreed that teacher-librarians informed teachers, students and administrators about new materials and services. Data showed 56 (35.7%) respondents agreed that teacher-librarians participate in school curriculum development and assessment. A number of respondents (67, 42.7%) agreed that teacher-librarians assist teachers in seeking information for lesson plans. The majority of the teachers agreed that the teacher-librarians should implement their roles. This indicates that the teachers do know about the role of teacher-librarians. The findings is identical to a research conducted by Miller (2005) which reported that teachers know but were unsure of the role of teacher-librarians because of the lack of collaboration between them. The findings are also similar to a study by Abrizah (1998) in a research that aimed to determine the essential competencies and the education required for teacher-librarians to perform their roles.

Most of the respondents believed that a teacher-librarian is an information expert. From the survey, 70 (44.6%) respondents agreed and 67 (42.7%) respondents believed (agree) that teacher-librarians play important roles within the school. This finding is identical to a research by Songsaengchan, Chansawang and Prapinpongsakorn (2008). Nevertheless, some of the respondents (61, 38.9%) also agreed that teacher-librarians need to have specific skills to perform important roles within the school and 69 (43.9%) respondents agreed that teacher-librarians have the ability to assess the information needs and interests of teachers and students.

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Table 2: Roles of Teacher-Librarians

<b>STATEMENTS</b>	<b>SA</b>	<b>A</b>	<b>N</b>	<b>D</b>	<b>SD</b>
1. Teachers' understand about the roles of teacher-librarians.	7 (4.5%)	49 (31.2%)	69 (43.9%)	31 (19.7%)	1 (0.6%)
2. Teachers' perception on ability of teacher-librarians to apply standard guidelines.	17 (10.8%)	69 (43.9%)	37 (23.6%)	27 (17.2%)	7 (4.5%)
3. Assist students in identifying and assessing information.	22 (14%)	75 (47.8%)	27 (17.2%)	21 (13.4%)	12 (7.6%)
4. Inform teachers, students and administrators about new materials and services.	21 (13.4%)	72 (45.9%)	33 (21%)	22 (14%)	9 (5.7%)
5. Participate in school and district curriculum development and assessment.	22 (14%)	56 (35.7%)	46 (29.3%)	28 (17.8%)	5 (3.2%)
6. Consult teachers in seeking information for lesson plans.	20 (12.7%)	67 (42.7%)	29 (18.5%)	28 (17.8%)	13 (8.3%)
7. Teacher-librarians as information experts.	28 (17.8%)	70 (44.6%)	29 (18.5%)	18 (11.5%)	12 (7.6%)
8. Teacher-librarians play important roles.	34 (21.7%)	67 (42.7%)	25 (15.9%)	27 (17.2%)	4 (2.5%)
9. Need to have specific skills to perform important roles.	54 (34.4%)	61 (38.9%)	11 (7%)	21 (13.4%)	10 (6.4%)
10. Ability to assess information needs and interests of teachers and students.	19 (12.1%)	69 (43.9%)	44 (28%)	18 (11.5%)	7 (4.5%)

SA = Strongly Agree, A = Agree, N = Not Sure, D = Disagree, SD = Strongly Disagree

**PRACTICES OF INFORMATION LITERACY**

In this section, the questionnaire consists of ten questions on how the teacher-librarians practice information literacy in their schools. The questions include level of teachers' understanding about information literacy, teachers' perception on the ability and skills of teacher-librarians, what teacher-librarians do with regards to information literacy in order to support teachers and students, and how confident the teachers are on their own to impart information literacy skills. (Table 3). The findings indicated that the majority of the respondents (75,

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47.9%) were unsure (neither agree nor disagree) about information literacy. This finding is parallel with the question asked on teachers' information literacy skill itself. It shows that the majority of respondents (69, 43.9%) were unsure (neither agree nor disagree) about their information literacy skills.

Table 3: Practices of Information Literacy

STATEMENTS	SA	A	N	D	SD
1. Teachers understand about information literacy.	5 (3.2%)	48 (30.6%)	75 (47.8%)	28 (17.8%)	1 (0.6%)
2. Applies information literacy to the teachers and students.	6 (3.8%)	54 (34.4%)	73 (46.5%)	20 (12.7%)	4 (2.5%)
3. Instructs teachers and students locate information.	23 (14.6%)	49 (31.2%)	50 (31.8%)	27 (17.2%)	8 (5.1%)
4. Instructs teachers and students to evaluate information.	9 (5.7%)	56 (35.7%)	54 (34.4%)	28 (17.8%)	10 (6.4%)
5. Instructs teachers and students in communicating information.	15 (9.6%)	54 (34.4%)	46 (29.3%)	32 (20.4%)	10 (6.4%)
6. Provide learning resources.	22 (14%)	70 (44.6%)	32 (20.4%)	22 (14%)	11 (7%)
7. Provide bibliographic instruction.	15 (9.6%)	55 (35%)	52 (33.1%)	30 (19.1%)	5 (3.2%)
8. Teachers' information literacy skills.	12 (7.6%)	50 (31.8%)	69 (43.9%)	19 (12.1%)	7 (4.5%)
9. Teaching information literacy as part of school plan.	11 (7%)	50 (31.8%)	50 (31.8%)	35 (22.3%)	11 (7%)
10. Assist teachers and students via traditional and electronic methods.	14 (8.9%)	68 (43.3%)	42 (26.8%)	22 (14%)	11 (7%)

This is supported by the next question where most of the respondents (73, 46.5%) were unsure (neither agree nor disagree) that teacher-librarians apply information literacy programs to the teachers and students. About 50 (31.8%) respondents were unsure that teacher-librarians instruct teachers and students in locating information. However, more than half of the respondents (56, 35.7%)

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agreed that teacher-librarians instruct teachers and students to evaluate information. Similarly, 54 (34.4%) respondents agreed that teacher-librarians instruct teachers and students in the aspect of communicating information. Teaching information literacy is part of any school plan. Findings showed that 50 (31.8%) \ respondents agreed with this statement.

The finding also showed that respondents agreed that teacher-librarians provide appropriate learning resources such as literature for students, accurately keeping with the aspects of the school curriculum. This finding is in tandem with a research by Ranjith, (2002), where he noted that in order to develop proactive study, teacher-librarians must provide a variety of resources to enhance independent learning skills and problem solving abilities among students. Teacher-librarians also provide bibliographic instruction where most of the respondents (55, 35%) agreed that teacher-librarians provide library orientation to students. In the present technology development, teacher-librarians also assist teachers and students in identifying and accessing information in the school library either via traditional or electronic methods. This is supported by the finding where a high number of respondents (68, 43.3%) agreed with this statement.

### **COLLABORATION BETWEEN TEACHER-LIBRARIANS AND SCHOOL TEACHERS**

This set of questions had been designed to investigate the collaboration between teachers and teacher-librarians and how effective is the collaboration. This section also consisted of ten questions including what teacher-librarians do in order to develop collaboration; encouragement by principal for teachers to plan with teacher-librarians, and teachers' perception about collaboration.

From Table 4, the results showed that 79 (50.3%) respondents agreed that teacher-librarians are part of the instructional team for the class. Respondents believed working with teacher-librarians would improve students' achievements. Furthermore, they believed (agree) that working with teacher-librarians would improve students' enjoyment of learning. Interestingly, in this study, it was found that the perception of teachers in terms of collaboration received the highest responses with 71 (45.2%) respondents agreeing that working with teacher-librarians would improve teachers' teaching skills.

The results also found that 58 (36.9%) respondents agreed that teacher-librarians have an important place on the agenda of staff meetings. Furthermore, 50 (31.8%) respondents agreed that the principals encourage teachers to plan with the teacher-librarians. This finding supports previous studies by Kadala (2008) and Lindsay (2000) when they reported that the principals were satisfied with

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teacher-librarians and used direct communication to get services by teacher-librarians.

Table 4: Collaboration of Teacher-Librarians and School Teachers

STATEMENTS	SA	A	N	D	SD
1. Teacher-librarians as part of instructional team.	16 (10.2%)	50 (31.8%)	46 (29.3%)	35 (22.3%)	10 (6.4%)
2. Working with teacher-librarians improves students' achievement.	24 (15.3%)	79 (50.3%)	36 (22.9%)	10 (6.4%)	8 (5.1%)
3. Working with teacher-librarians improves students' enjoyment of learning.	35 (22.3%)	64 (40.8%)	37 (23.6%)	13 (8.3%)	8 (5.1%)
4. Working with teacher-librarians improves teachers' teaching skills.	33 (21%)	71 (45.2%)	29 (18.5%)	18 (11.5%)	6 (3.8%)
5. Teacher-librarians has important place on the agenda of staff meetings.	25 (15.9%)	58 (36.9%)	44 (28%)	18 (11.5%)	12 (7.6%)
6. Principals encourage teachers to plan with the teacher-librarians.	18 (11.5%)	50 (31.8%)	47 (29.9%)	32 (20.4%)	10 (6.4%)
7. Teacher-librarians encourage teachers to use a range of resources beyond the textbook.	23 (14.6%)	55 (35%)	44 (28%)	26 (16.6%)	9 (5.7%)
8. Develops appropriate services for teachers according to goals and objectives of teaching.	19 (12.1%)	56 (35.7%)	47 (29.9%)	22 (14%)	13 (8.3%)
9. Often plan lessons with teacher-librarians.	13 (8.3%)	42 (26.8%)	38 (24.2%)	37 (23.6%)	27 (17.2%)
10. Consults with teachers to incorporate information materials and skills into the classroom curriculum.	12 (7.6%)	48 (30.6%)	50 (31.8%)	33 (21%)	14 (8.9%)

SA = Strongly Agree, A = Agree, N = Not Sure, D = Disagree, SD = Strongly Disagree.

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The study also found that some of the respondents (55, 35%) agreed that teacher-librarians encourage teachers to use a range of resources beyond textbooks. This is also reported in a research by Lindsay (2000) where the principals encouraged teachers to use a range of resources beyond the textbooks in their instruction. However, the finding showed that some of the respondents (50, 31.8%) were unsure (neither agree nor disagree) that they consult with the teacher-librarians about incorporating information materials into the classroom curriculum. However some respondents 42 (26.8%) agreed that they often plan lessons with the assistance of the teacher-librarians.

### **CONCLUSION AND RECOMMENDATIONS**

Based on the findings, although many of the respondents admitted that teacher-librarians had been performing their roles, there are some of them who are unsure of the roles of the teacher-librarians. The roles of teacher-librarians should be informed to all teachers to ensure that these roles can be implemented. Teachers should know the roles of the teacher-librarians. Teacher-librarians must carry out research in order to understand and know the interest of teachers and to find ways to attract them to use the resource centers and the services of teacher-librarian. A closer examination of teacher librarians' views of themselves in relation to their roles and responsibilities will be of great insight. .

In terms of collaboration with teachers, teacher-librarians should examine various aspects of the learning processes in order to create with better collaborations that are more effective. Another approach that could be taken by the school management, in particular the school principal, is to pave the way for more dynamic collaborative educational partnerships to take place between the teachers and teacher-librarians and for the reform of the school library programs (Hartzell, 2002; Pharr, 2002). For instance, teachers could be given less teaching periods in a week so that they could use that time to meet with the teacher-librarians to synergize and develop comprehensive, interesting, and dynamic lessons and other academic activities.

There must be information literacy programs for the teachers. This approach will improve teachers' understanding on information literacy skills needed at the present time where there are too much information and this makes it difficult for teachers and students to identify which are more authoritative for academic purposes. Living in the age where information is in abundance makes it necessary to use and manage information at all levels; whether it is for personal or organizational. Information literacy programs aim to provide the foundation for continuous growth for both teachers and students in fulfilling their roles as informed citizens.

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## **REFERENCES**

- Abrizah Abdullah. 1998. Competencies for teacher librarians in Malaysia. *Malaysian Journal of Library & Information Science*, Vol. 4, no. 2: 21-40. Accessed on 10 February 2010 from: <http://ejum.fsktm.um.edu.my/article/146.pdf>
- American Association of School Librarians and Association for Educational Communications and Technology. 2007. *Information literacy standards for student learning: Standards and indicators*. Accessed on 1 February 2010 from: [http://www.ilipg.org/sites/ilipg.org/files/bo/InformationLiteracyStandards\\_final.pdf](http://www.ilipg.org/sites/ilipg.org/files/bo/InformationLiteracyStandards_final.pdf)
- American Library Association. Presidential Committee on Information Literacy. 1989. *Presidential Committee on Information Literacy: Final report*. Accessed on 1 February 2010 from: <http://www.ala.org/ala/acrl/acrlpubs/whitepapers/presidential.html>
- American Library Association. 2000. *Information Literacy Competency Standards for Higher Education*. Chicago: ALA
- Association for Teacher-Librarianship in Canada. 1998. *Competencies for Teacher-librarians in the 21st Century*. Accessed on 1 February 2010 from: <http://www.highbeam.com/doc/1G1-54130794.html>
- Audience Dialogue. 2006. *Choosing Qualitative or Quantitative Research Methods*. Accessed on 1 May 2010 from: <http://www.audiencedialogue.net/qualiquant.html>
- Chan Foong Mae. 2002. Developing information literacy in Malaysian Smart Schools: resource-based learning as a tool to prepare today's students for tomorrow's society In: Singh, D et al. (Ed.): *School Libraries for a Knowledge Society. Proceedings of the 31st Annual Conference of the International Association of School Librarianship*, Petaling Jaya, Kuala Lumpur, Malaysia (4-9 August, 2002). Seattle, WA, IASL: 203-215.
- CILIP (Chartered Institute of Library and Information Professionals). 2006. *A Short Introduction to Information Literacy*. Accessed on 1 February 2010 from: <http://www.cilip.org.uk/professionalguidance/informationliteracy/definition/introduction.htm>

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- Council on Teacher Education. 2003. *School Agency Specific Question*. Accessed on 10 February 2010 from:  
[http://www.cote.illinois.edu/forms/documents/bbp\\_school\\_specific\\_questionaire.e.pdf](http://www.cote.illinois.edu/forms/documents/bbp_school_specific_questionaire.e.pdf)
- Hancock, V. E. 2003. Information Literacy for Lifelong Learning. *Library Instruction*. Accessed on 10 February 2010 from:  
<http://www.libraryinstruction.com/information-literacy.html>
- Hartzell, G. 2002. What's it take? IMLS (Institute of Museum and Library Services). Paper presented at the *White House Conference on School Libraries*. Accessed on 10 February 2010 from:  
<http://www.laurabushfoundation.org/Hartzell.pdf>
- Horton, W. 2003. Information literacy beyond the library: The national forum on information literacy. *College & Undergraduate Libraries*, Vol. 17, no. 1: 114-120.
- Hurray, J. 2000. Librarians evolving into cybrarians. *Multimedia Schools*, Vol. 7, no. 2: 26-29
- Intan Azura Mokhtar and Shaheen Majid. 2006. An explanatory study of the collaborative relationship between teachers and librarians in Singapore primary and secondary schools. *Library & Information Science Research*, Vol. 28: 265-280.
- Kadala, A. C. 2008. Communication techniques between Principals and School Library Media Specialist in One North Carolina County. Retrieved 10 February 2010, from:  
<http://www.etsd.ils.unc.edu/dspace/.../1/Ann+Kadala+Masters+Paper+PDF.pdf>
- Lindsay, K. 2000. Teacher/teacher-librarian collaboration: A study of instructional choices made by frequently, moderate and non-users of school library services. Retrieved 10 February 2010, from:  
<http://tldl.pbworks.com/f/Lindsay.pdf>
- McDonald, S. B. 2006. The role of technology in interactions between Secondary Library Media Specialists and Teachers. *Electronic Thesis & Dissertation*, Louisiana State University. Accessed on 10 February 2010 from:  
[http://etd.lsu.edu/docs/available/etd-04022006-211850/unrestricted/McDonald\\_dis.pdf](http://etd.lsu.edu/docs/available/etd-04022006-211850/unrestricted/McDonald_dis.pdf)

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- Miller, K. 2005. Novice teachers' perceptions of the role of the teacher-librarian in information literacy. *School Libraries in Canada*, Vol. 12, no. 1: 39-49. Accessed on 10 February 2010 from: <http://www.tldl.pbworks.com/f/Miller.pdf>
- Mohd Sharif Mohd Saad and N. N. Edzan. 2005. Information literacy initiatives in Malaysia : A framework. *Proceedings of the PPM/LAS Commemorative Conference*, Kuala Lumpur, Malaysia.
- Montiel, P. 2009. Teachers' perceptions of teacher and librarian collaboration: Instrumentation development and validation. *Library & Media Science Research*, Vol. 31, no. 3: 182-191.
- Nor Fariza M. N. and Azizah Ya'acob. 2009. Facilitating lifelong learning through development of information literacy skills: a study of integrated project work. *European Journal of Social Sciences*, Vol. 9, no. 3.
- Pharr, F. 2002. Reflections of an empowered library. Paper presented at the *White House Conference on School Libraries*. Accessed on 1 February 2010 from: <http://www.laurabushfoundation.org/Pharr.pdf>
- Ranjith, A. M. 2002. *The Roles of Teacher Librarians: A Sri Lankan Perspective*. Unpublished master's dissertation. University of Malaya, Kuala Lumpur. Accessed on 1 February 2010 from: <http://dspace.fsktm.um.edu.my/handle/1812/657>
- Songsaengchan, S.; B. Chansawang and B. Prapinpongsakorn. 2008. Teacher Librarians' Roles in Information Literacy Instruction in Bangkok Secondary Schools. Accessed on 1 Feb 2010 from: [http://hu.swu.ac.th/updoc/17sasipimol\\_thai\\_JS.pdf](http://hu.swu.ac.th/updoc/17sasipimol_thai_JS.pdf)
- Tan Shyh-Mee and Diljit Singh. 2008. An assessment of the information literacy levels of library and media teachers in the Hulu Langat district, Malaysia. Accessed on 1 Feb 2010 from: <http://myais.fsktm.um.edu.my/8581/>
- Tanni, M. 2008. Prospective history teachers' information behavior in lesson planning. *Information Research*, Vol. 13, no. 4. Accessed on 1 Feb 2010 from: <http://informationr.net/ir/13-4/paper374.html>