

## The Changing Role of School Libraries/Media Resource Libraries in Secondary Schools in Singapore and the Need to Implement Mandatory Standards, 1946-2010: Issues, Challenges and Opportunities

LIM PENG HAN, P.H.Lim@lboro.ac.uk  
Department of Information Science, Loughborough University

### ABSTRACT

The aim of this paper is to study the development and evolution of secondary school libraries into Media Resource Libraries (MRLs) in Singapore after the Second World War and the rationale to have mandatory school library standards. It is an historical survey analysing published data about the linkages of libraries and librarianship, school library standards, education and school reforms in Singapore. It analyses historical and current documents on the roles played by stakeholders like the Library Association of Singapore (LAS) and the Ministry of Education (MOE) in the introduction and development of school library standards. The need for school libraries standards was first discussed when the Malayan Library Group (MLG) organised the first course on librarianship for school teachers in 1955. But there was no follow up. The need for school libraries standards was also mentioned by the LAS in 1962 when a memorandum to the Commission of Enquiry into Education to train teacher librarians and school library standards to be formulated and adopted in schools. However, it was left out in the final report of the Commission published in 1964. The need for school library standards was discussed in a school library seminar for 150 teacher librarians in 1970. The first *Recommended minimum standards for secondary school libraries* was published two years later by the Standing Committee on Libraries set up by the MOE. But it was not mandatory of schools to adopt the standards. In 1997 the MOE launched its "Thinking School Learning Nation" vision to teach thinking skills. Students were expected to do multidisciplinary project work and to be independent users of information. The MOE began to convert school libraries into Media Resource Libraries (MRLs) with print and non-print materials. However, a survey conducted in 2001 on the roles and competencies of 112 Library Coordinators (LCs) or teacher librarians revealed that they lack the skills and knowledge to management MRLs effectively. This is because subsequent school library standards published in 1983 and 2002 did not require trained and full-time teacher librarians to manage the MRLs. Furthermore, it is essential for the standards to be periodically updated with regards to professional staff, collection development, facilities, Information and Communications Technology (ICT) infrastructure and school library programs. Otherwise MRLs risk to being "hollow shells still considered on the periphery of core educational requirements", and are run by teachers not professionally prepared to do the work. The national standards published in the United States from 1918 to 2008 are well researched and provided substantive guidelines to develop school libraries. Therefore it is essential for the MOE to formulate MRL standards by doing comparative studies of school library standards in other countries. These standards have to be mandatory and fully adopted by the schools. It provide opportunities for stakeholders like the LAS, National Library Board (NLB), the National Institute of Education (NIE) and the Singapore Teachers' Union, to collaborate in the formulation these standards and take collective ownership to implement them.

**Keywords:** School library standards; Media Resource Libraries; Library Coordinators; School Library Officers; Singapore

### INTRODUCTION

This paper aims to study the development of school reforms from 1946 to 2010 that affected secondary school libraries to change into Media Resource Libraries (MRLs) and to examine the role and relevance of school library standards in the change process. It attempts to identify the factors that affect the changes in secondary school library standards first published in 1972. This research tries to evaluate whether school library standards support and enhance the development and management of school libraries/MRLs and provide the relevant information mix and school library programmes.

The author evaluated and analysed secondary school library standards published in Singapore from 1972 to 2010 and compare them with school library standards and policies published in other countries like Canada, Hong Kong and the United States. The findings suggest that secondary school libraries standards did not evolved sufficiently to support the development of MRLs.

### ***Schooling during British and Japanese Colonial Rule, 1819-1945***

Sir Stamford Raffles founded Singapore on behalf of the East India Company (EIC) in 1819. In 1826 the three settlements of Singapore, Penang and Malacca were amalgamated to form the Straits Settlements (Jarman, 1998, p. v). Singapore did not have a native population and the three main races of Chinese, Malay and Indian came into the island at some time or another (Saw, 1969, p 41).

The Education Department was established in 1872 to expand Malay and English schools (Wong & Gwee, 1980, p. 11). In 1891 the University of Cambridge Local Examinations Syndicate (UCLES) was introduced marking the beginning of English secondary schools (Hill, 1892, p. 267). The Education Department decided to start libraries in English and Malay government funded schools in 1899 (Wilkinson, 1900, pp. 136-137).

In 1937 there were four English secondary boys' school (Keir, 1938, p. 57). All had school libraries (Watson, 1930, p. 21; Johnston, 1930, pp. 78-79; Brown, 1987, p. 28; Lau & Teo, 2003, p. 58). There were three English secondary girls' schools and Raffles Girls' School was known to have a school library (Corner, 1981, p. 158). There were three Chinese secondary schools in 1937 (Keir, 1938, p. 107) and two had school libraries (Morten, 1936, p. 75; Tan, 1991, p. 80).

After the Japanese occupation from 1942 to 1945, most school were left vacant with books and libraries looted (Neilson, 1949, pp. 553-554).

### ***New Secondary School System in the English, Chinese, Malay and Tamil Streams***

In 1946 the settlement of Singapore was separated from the settlements of Penang and Malacca, to become a separate Colony (McKerron, 1947, p. 11). The Ten-year programme for education was implemented in 1947 to provided universal free primary education in the Malay, Chinese, Tamil and English languages (Balakrishnan, 1978, p. 1). Each newly built primary school had 14 classrooms, one staff room, a principal's room and a storeroom. There was no plan for a school library (Cuthberson, 1951, pp. 31-42).

After the first local government took office in 1955, the Ministry of Education (MOE) was established, replacing the former Education Department (McLellan, 1957, p. 1). By 1963 MOE established a common primary and secondary education system in the four language streams (Seah & Seah, 1983, p. 241).

### ***Formation of the Malayan Library Group (MLG)***

It can be said that the period of modern school librarianship began with the formation of the Malayan Library Group (MLG) in 1955 (Chan, 1980, p. 45), the first library professional group to be established in Singapore and Malaya. The MLG organized a course "in the rudiments librarianship...intended primarily for teacher librarians" (Lim, 1955, p. 34). The participants requested the MLG to make representation to the MOE, principals and teachers' organizations with regards to school library standards, including poor supervision and facilities (Lim, 1956, pp. 47-48). Hence the need for school library standards was first mentioned in 1955.

### ***First Survey On English and Chinese Secondary School Libraries***

The LAMS was dissolved on 27 February 1960 and the Library Association of Singapore (LAS) was inaugurated (Chan, 1980, p. 45). In the same year the LAS conducted the first survey on secondary school libraries in Singapore (Eu and Anuar, 1971, pp. 31-32). The key findings of the survey from 77 out of 120 respondents were:

1. The library period provided no instruction on the use of books and libraries.
2. Fifty schools had teacher librarians. Only 14 schools gave teacher librarians time to run the library during school hours. Teacher librarians in 37 schools had to teach full-time and could only organize their libraries during spare time.
3. Most schools had their libraries in separate rooms, which varied very much in size and in accommodation. Some schools had their library books locked in cupboards.
4. Government secondary schools built after the war did not have provision for a school library.

5. Few schools had newspapers or audio-visual aids (Eu & Anuar, 1971, pp. 31-32).

In 1962 the LAS Standing Committee on School Libraries used the survey findings and sent a memorandum to the MOE and to the Commission of into Education. It highlighted the role of the school library as an integral part of the school (Lim, 1962, p. 100). The memorandum also made statements to have school library standards (Lim, 1964, pp. 37-38). The Commission recommended the appointment of a School Library Advisor at the MOE, funding for school libraries, training and time given to teachers to manage school libraries (Lim, 1964, p. 97). However, the issue of school library standards were left out.

### ***First School Librarianship Course for Teachers (1968/1969)***

In 1968 a Fulbright-Hay lecturer in library science, Marion Bernice Wiese, was appointed to conduct teacher librarianship courses at the TTC until 1969 (Wiese, 1969a. p. 1586). Ninety-two secondary school teachers attended the school librarianship courses (Wang-Chen, 1971, p. 2).

Wiese was previously involved with the Knapp School Libraries Project in the United States to develop model school libraries (Sullivan, 1968, p. 112). She felt that school libraries should be staffed by full-time trained teacher librarians. These are qualified teachers who had successfully completed the required number of library courses, should also have been trained to compile annotated bibliographies and schedule class visits for instruction in library skills. In 1969 she formulated a proposed manpower plan for school libraries for the years 1970 to 1985 (Weise, 1969b). However, this plan was never discussed or implemented probably because there was no department in the MOE in charge of school libraries and there was a serious shortage of teachers estimated between 600 and 1,000 (*Straits Times*, 1970, p. 2).

### ***School Library Section, LAS (1969-1980)***

The School Library Section was inaugurated in 1969 to establish, evaluate and promote standards in school libraries and to organise projects for services in school libraries (Lim, 1971, p. 99). The School Library Section was dissolved in 1980 (Lim, 1980, p. 23), probably due to the lack of leadership or interest.

### ***Second Survey On English, Chinese and Malay Secondary School Libraries***

Douglas Koh (1971, pp. 17-20) conducted a survey on 117 secondary schools in Singapore in 1968/69 and had a response rate of 100 schools or 85 per cent.

1. He discovered that school libraries were put in charge by untrained personnel who were not given sufficient time to do their job. None of the school libraries had a full-time librarian.
2. There was no written policy for book selection in any of the school libraries.
3. In 95 schools, the room labelled as library, was, in a majority of cases, nothing more than a classroom converted for library purposes.

Koh's findings were presented for discussion at a two-day seminar on school libraries attended by 150 teacher librarians. The seminar recommended that:

1. A School Library Unit to be set up at the MOE.
2. Teacher librarians should be trained at the TTC.
3. Teacher librarians should be given time to manage school libraries.
4. The MOE should give urgent attention to the compilation of minimum standards for school libraries in areas of personnel, finance, library resources, accommodation and equipment (Koh 1971, pp. 27-28).

### ***First Recommended Minimum Standards for Secondary School Libraries***

The first *Recommended minimum standards for secondary school libraries* was published in 1972. It specified that a trained teacher-librarian, who has completed a recognised course in school librarianship and has the status of a specialist teacher, should be in charge of the library

(Standing Committee for School Libraries, 1972). However in practice, it was not mandatory of schools to implement.

Similarly, in 1967 the Canadian School Library Association (CLSA) published *Standards of library service for Canadian schools* which were not mandatory to implement. Five years later, not more than five per cent of the school libraries met the CLSA standards for the personnel, materials and facilities necessary to develop good, not superior services. Only nine per cent of all school librarians in Canada were fully qualified according to CLSA standards with both teaching certification and a library degree. The lack of sufficient, qualified school librarians and para-professional staff in school libraries was a major factor inhibiting the development of quality school library programmes (Scott, 1971, pp. 122-125).

### **MOE's School Library Unit**

Although the School Library Unit was set up in 1973 (Wee, 1983, p. 1), it began to provide funding to schools in 1977 after conducting a survey on school buildings and discovering that some 350 old primary and secondary schools with no libraries in their school building plan (Mosbergen, 1978, pp. 28-29). The School Library Development Scheme provided funding for 65 schools to convert spare classrooms as extension for library rooms. The Director of Education explained that during the 1960s and 1970s the MOE gave low priority to develop school libraries due to the need to build more schools and to train teachers (Chan, 1978, p. 4-8).

In 1977 the MOE created the post of Library Coordinator (LC) (Tan, 1977, p. 34). The LC is a trained teacher "entrusted with the job of developing the library as a resource centre...while performing duties as a full-time teacher". In many cases the LC have no prior knowledge on how to run a library (Lee, 1992, p. 74).

In 1983 the MOE published a handbook for school libraries, including guidelines for school libraries. However, except for improvements in the required ratio of books for pupils, the increased library space, there were no requirements to have a full time teacher librarian (Tan, 1983). In 1984 the Government implemented the National Stream whereby 99.3 per cent of the Primary One cohort enrolled in English schools (Ministry of Education, 1987, p. 3).

### **School Library Development Project**

In 1982 the MOE initiated School Library Book Development Project strictly for the purchase of books to achieve the desired book ratio of 1 pupil to eight books for primary schools and 1 pupils to 10 books for secondary schools (School Library Unit 1983, p. 1) By 1987 more than half of the 140 secondary schools have attained the target of 10 books for every pupil. The second phase began from 1988 to 1996 to increase the book ratio from one secondary school pupil to 12 books (Chen, 1987, p. 2). Hence the School Library Development projects were narrowly restricted to books only and not non-print material or the provision of formal training for teacher librarians.

Anuar (1971, p. 30) stressed that finance was not the main problem in the improvement of school libraries. The main problem was the lack of sufficient number of trained school librarians, the lack of library periods and the need for strict and careful book selection. In the United States every public secondary school with 500 or more pupils in 1993/94 had at least one full-time certified library media specialist (U. S. Department of Education, 2002, p. 490).

### **The University of Cambridge Local Examination Syndicate (UCLES) Examination System**

During the early 1960s and 1990s the UCLES examination system did not encourage reading and independent learning. Wiese, (1969a, p.1588) observed that "because of the continuance of some of the British educational practices... the stress on passing examinations and following the syllabus leaves little time for supplementary reading, for class visits to the library, or for teaching library skills." Lee (1992, p. 77), a Specialist Inspector, Library and Reading programme, MOE, stated that many secondary schools do not include a library period in their curriculum. This was probably due to the heavy demands of the secondary schools' curriculum.

### ***From School Libraries to Media Resource Libraries (MRLs)***

In 1997 the MOE launched the *Thinking Schools, Learning Nation* vision to equip students with skills, knowledge, values and instincts for a culture of learning beyond the school environment. Students spend more time on projects that can help them to become thinking and creative individuals (MOE, 1998, pp. 16-17).

The MOE began to upgrade all school libraries to Media Resource Libraries (MRLs). The MRL is (1) a resource centre for both print and non-print materials; (2) a learning centre where overt learning and teaching can take place together with the traditional overt learning; and; (3) a reading centre where both recreational and serious reading are pursued with equal diligence (Chen, 1997, pp. 1-2). The role of the LC or teacher librarian began to change dramatically. The teacher librarian is expected to help students learn to search and evaluate information in print and electronic resources. Students are empowered to work co-operatively and be independent users of information (Khew, 1997, p. 6).

### ***Outsourcing of MRLs***

In 1998 the MOE awarded CARL and the National Computer Systems Pte Ltd to install a single library automated system that was intended to link all primary, and secondary schools. The MOE Integrated Library Network System (MERLIN) would enable teachers and students to search for information beyond the collection in their school library (Hayworth, 2000, p. 44).

In 1999 the School Library Unit was dissolved. The Educational Technology Division (ETD) of the MOE was established in 1999 to provide direction on the use of educational technology in schools (Ministry of Information and the Arts, 1999, p. 251). The Media and Infrastructure Support Branch was set up as part of the ETD to “set direction for school resource media library programme” (Ministry of Information and the Arts, 2000, p. 258).

### ***Staffing Requirements: Library Co-ordinators***

In 2001 there were 112 Government secondary schools, 24 Government-aided schools, 15 autonomous schools and 8 independent schools, all using English as a medium of instruction. In the same year Tsai (2001) did a survey on 112 (or 70 per cent) of 159 Library Co-ordinators in these schools. The findings suggest that the LCs lack relevant skills and knowledge to manage a MRL effectively. The MOE did not have any published guidelines or a comprehensive set of descriptive attributes of a LC (Tsai, 2001, p. 66).

Since 1979, secondary schools in Hong Kong with 18 or more classes could appoint a non-graduate teacher to manage school libraries full-time. These school librarians were required to complete a two-year part-time in service training course organised by the Education Department and the Department of Extra-Mural Studies, University of Hong Kong (Kan and Wan, 1988, p. 71). It is essential to have school library standards for LCs in terms of their qualifications and experience. The MOE should certification standards as widely practiced in the United States (Thomas, 2006). The standards must specify the job descriptions of the LCs in detail. In Singapore all teachers received their training at the National Institute of Education (NIE) and LCs can do a master's degree course in information studies with specialization in school media resource management.

According to Professor Thomas Hart (2001, p. 25), the MOE do not seem to realise that well-trained school media specialists are critical to Ministry's initiatives to emphasise “creativity, information literacy, project and broad-based education”. Secondary schools in advanced countries had full-time directors of school libraries since the late 1960s. Full-time information specialists work with teachers to develop information literacy activities and ensure that instructional activities and technologies are meaningful.

### ***Staffing Requirements: School Library Officers***

In her focus group study of seven School Library Officers (SLOs) in 1999, Gee (1999, p. 56) discovered that “SLOs cannot perform the day-to-day operations without help from library professionals, and cannot provide intellectual support to the users because of their lack of training in educational theory and practice”. There is no clear documentation of the roles and

responsibilities and training for library staff at each level (Gee, 1999, p. 4). The tender documents for the outsourcing of School Library Officers and Library Assistant do not specify the professional and academic qualifications of the positions.

The second cycle of the outsourcing for the years 2005 to 2010 was given to a different vendor. MERLIN had to be changed into another library automation system. The same vendor successfully won third cycle tender for 2010 to 2013 to manage the school library automation system, the supply of books and full-time library assistants and full-time library officers for the primary and secondary schools. About 66 per cent of secondary schools outsourced their manpower requirements and 91 per cent outsourced the purchasing of books (MOE, 2009). However, the 2010 requirements prescribed by the MOE in terms of staffing, collection development and funding showed that the standards or guidelines for secondary school libraries since it was published in 1972 and were not updated and were inadequate to support the development of MRLs and its library programs.

### **Collection Development**

In 2010 a vendor has been appointed to source shelf ready books for about 91 per cent of the 156 secondary schools. No pupil book ratio was stated. In 2006 a survey to 1,696 media specialist was conducted in 47 states in the United States. Eighty-eight per cent of the respondents revealed that the total annual budget for each middle school was US\$13,978 of which US\$2,020 (14 per cent) was spent on technology like electronic resources. The total budget for each high school was US\$22,005 of which US\$5,755 (26 per cent) was spent on technology (Brewer and Milam, 2006, p. 48). In 2009 Singapore the secondary school MRL annual budget was about US\$3,035. This 25 per cent of the average annual expenditure in 2006 for a middle school in the United States.

Miller and Shontz (2003, p. 56) did a survey on 170 middle high school and 181 high school in the United States during the years 2001- 2001. They recorded a ratio one pupil to 15 books. The standard pupil book ratio in Singapore was 1 pupil to 12 books in 2002 and it was not specified in the tender documents in 2010 as shown in Table 1.

**Table 1: Comparing standards and guidelines for collection development in 2001 and 2010 for secondary schools MRLs**

	2002 <sup>1</sup>	2010 <sup>2</sup>
Print	Pupil: Book Ratio 1:12	\$3,900 (Singapore dollars) per school or US\$ 3,035.98 per school
Non-Print	To comprise 15 per cent of the total print and non-print collection Pupil: Item Ratio 1:2	Nil

Sources: <sup>1</sup>Kwek, 2002; <sup>2</sup>MOE, 2009.

### **CONCLUSION**

Since the publication of the first minimum standards for secondary schools in Singapore in 1972, subsequent revision either as standards and guidelines, have not be well researched and updated to keep up with the changes required of 21<sup>st</sup> century MRLs. Although the MOE's School Library Unit was established in 1973, the staff did not update school library standards with the changing times and school curriculum. After the Unit was closed in 1999, the MOE did not make comparative studies school library standards and policies in other countries with its last known standards published in 2002.

In the United States the growth and development of school libraries was due to school library standards. The national standards published in 1918 (*Standard library organization and equipment of secondary schools of different sizes*), 1945 (*School Libraries for today and tomorrow*), 1960 (*Standards for school library programs*) and 1969 (*Standards for school media programs*) and 1975 (*Media programmes: district and school*), were well researched and provided substantive guidelines to develop school libraries (Knuth 2002, p. 265).

According to Goh (1993, p. 10), the history of school librarianship and libraries in Singapore has shown that the onus for school library development and improvement has been primarily with the MOE. Therefore the challenge is to convince the MOE in formulating, publishing and implementing a set of updated mandatory MRL quantitative and qualitative standards in the areas of staffing, collection development, instructional programs and facilities.

The 1975 standards, published by AASL and National Education Association (NEA), were developed incorporating of 29 organizations or associations (AASL & NEA, 1975, p.i). As more organizations were involved with the development of standards they had a sense of wider ownership to implement them. There are opportunities for stakeholders like the Library Association of Singapore, the National Library Board, the National Institute of Education, and the Singapore Teachers' Union to collaborate in the formulation of these standards.

This research attempts to highlight the necessity to have up to date mandatory qualitative and quantitative MRL standards to develop MRLs as the heartbeat of the school and to encourage independent learning in schools. Otherwise most MRLs "are really hollow shells still considered on the periphery of core educational activities, and are run by teachers not professionally prepared to do the work" (Hart, 2001, p. 25).

## REFERENCES

- AASL & NEA. (1975) *Standards for school media programs*. Chicago: American Library Association and National Education Association.
- Anuar, H. (1971). Closing address. *Singapore Libraries*, 1, 29-30.
- Balakrishnan. (1978). Educational legislation in Singapore, 1948-1961. *Southeast Asian Journal of Educational Studies*, 15 (1/2), 1-31.
- Brewer, S. & Milam, P. (2006). SLJ's technology survey 2006. *School Library Journal*, June, 48-52.
- Brown, F. (1987). *Memories of SJI: reminiscences of old boys and past teachers of St Joseph's Institution*. Singapore: The Institution.
- Chan, K. Y. (1978). Second conference on school library development: keynote address. *Teachers Rostrum*, 5(5), 4-7.
- Chan, T. S., et al. (1980). Twenty-five eventful years: A chronicle of LAS activities, 1955-1970. In Michael Cheng (et al.) (Ed.), *Library Association of Singapore: silver jubilee, 1955-1980* (pp. 45-58). Singapore: Library Association of Singapore.
- Chen, C. J. (1997). Address by Mrs Chen Cheng Joo, Assistant Director Languages and Library Branch on 28 February 1997 at the Combined Zonal Meeting for Heads of Department (Media Resource Library). *Link-up*, 17(2), 1-2.
- Chen, M. (1987). Grooming the human resource. *Mirror*, 23(7), 1-3.
- Corner, E. J. H. (1981). *The Marquis: A tale of Syonan-to*. Singapore: Heinemann Asia.
- Cuthbertson, D. (1951). The Singapore Education Plan. *The Quarterly Journal of the Institute of Architects of Malaya*, 1(3), 31-48.
- Eu, M. & Anuar, H. (1971). School libraries in Singapore. *Singapore Libraries*, 1, 31-42.
- Gee, M. M. (1999). *The roles and training needs of library support staff in Singapore schools* (Unpublished master's thesis). Nanyang Technological University, Singapore.
- Goh, S. T. (1993). *The role of the library co-ordinator in secondary schools: The perception of principals and library co-ordinators* (Unpublished master's thesis). National University of Singapore, Singapore.
- Hart, T. (2001, April 14). Media specialist needed to guide students. *Straits Times*, p. 25.
- Hayworth, G. (2000). Singapore libraries ushers in a new era. *Computers in Libraries*, 20(10), 42-46.
- Hill, E. C. (1892). *Straits Settlements annual report on education for the year 1981*. Singapore: Government Printing Office.
- Jarman, R. L. (1998). *Annual reports of the Straits Settlements 1855-1869: Volume 1*. London: Archives Editions Limited.
- Johnston, J. (1930). The work of the Junior Library. In Song Ong Siang (Ed.), *The Straits Chinese Annual* (pp. 75-77). Singapore: The Straits Times.
- Kan, L. B. & Wan, A. S. W. (1988). Libraries in Hong Kong: growth and development. *Singapore Libraries*, 18, 65-74.

- Keir, A. (1938). *Annual reports on education in the Straits Settlements and the Federated Malay States for the year 1937*. Singapore: Government Printing Office.
- Khew, S. (1997). Information literacy in the modern library. *Link-up*, 17 (2), 6.
- Koh, D. (1971). Secondary school libraries in Singapore. *Singapore Libraries*, 1, 17-28.
- Kwee, M. (1979, July 5). New start for 91,000 pupils. *Straits Times*, p. 1 & pp. 16-17.
- Kwek, H. C. (2002). *Media resource library handbook*. Singapore: Ministry of Education.
- Lau, E. & Teo, P. (2003). *The ACS story*. Singapore: Concordia Communications Pte Ltd.
- Lee, F. C. (1992). School libraries in Singapore. In Soekarman and S. S. Wardaya (Eds.), *Introduction to ASEAN librarianship: school libraries* (pp. 71-79). Jakarta: The ASEAN Committee on Culture and Information.
- Lim, Beda. (1955). Librarianship course. *Malayan Library Group Newsletter*, 1(2), 34.
- Lim, Beda. (1956). Report on the librarianship course. *Malayan Library Group Newsletter*, 1(3), 47-48.
- Lim, H. T. (1980). Dissolution of the School Library Section, *LAS Newsletter*, February, p. 23.
- Lim, P. P. H. (1962). Libraries for Singapore schools. *Majallah Perpustakaan [Singapore Library Journal]*, 2(2), 100.
- Lim, T. B. (1964). *Commission of inquiry into education, Singapore: final report*. Singapore: Government Printing Office.
- McKerron, P. A. B. (1947). *Report on Singapore for 1<sup>st</sup> April – 31<sup>st</sup> December 1946*. Singapore: Government Printing Office.
- McLellan, D. (1957). *Department of Education annual report 1955*. Singapore: Government Printing Office.
- Miller, M. L. & Shontz, M. (2003). The SLJ spending survey. *Singapore Library Journal*. October, 52 – 59.
- Ministry of Education. (1987). *Press release*, May 2.
- Ministry of Information and the Arts. (1999). *Singapore Government Directory: July 1999*. Singapore: Times Trade Directories Pte Ltd.
- Ministry of Information and the Arts. (2000). *Singapore Government Directory: January 2000*. Singapore: Times Media Pte Ltd.
- MOE. (1998). *Learning to think thinking to learn: towards thinking schools learning nation*. Singapore: Ministry of Education.
- MOE. (2009). *Outsourcing of School Media Resource Libraries*. Singapore: Ministry of Education.
- Morten, F. J. (1936). *Annual report on education in the Straits Settlements for the year 1935*. Singapore: Government Printing Office.
- Mosbergen, R. W. (1978). Present trends in school library development. *Singapore Libraries*, 8, 28-30.
- Neilson, J. B. (1949). Singapore: A polygot population. In G. B. Jeffrey (et al.) (Eds.), *The year book of education 1949* (pp. 552-558). London: Evan Brothers Ltd.
- Knuth, R. (2002). International models of school library development In Allen K. and C. A. Hall (Eds.), *Encyclopaedia of library and information science*, Volume 70 (pp. 264-277). New York: Marcell Dekker.
- Saw, S. H. (1969). Population trends in Singapore, 1819-1967. *Journal of Southeast Asian History*, 10 (1), 36-49.
- School Library Unit. (1983). School library development project. *Link-up*, 6, 1.
- Scott, M. B. (1971). School libraries in Canada. *Canadian Library Journal*, 29(2), 240-267.
- Seah, C. M. & Seah, L. (1983). Education reform and national integration. In Peter Chen (Ed.), *Singapore development policies and trends* (pp. 240-267). Petaling Jaya: Oxford University Press.
- Standing Committee on Libraries. (1972). *Recommended minimum standards for secondary school libraries*. Singapore: Curriculum Section, Ministry of Education.
- Straits Times*. (1970, August 6). Malaysians fill teacher vacancies. p. 2.
- Sullivan, P. (Ed.). (1968). *Realization: the final report of the Knapp school libraries project*. Chicago: American Library Association.
- Tan, C. H. (1977). Developing our secondary school library services. *Teachers Rostrum*, 5(2), 34.
- Tan, C. H. (1983). *Handbook on school library organization and management*. Singapore: Ministry of Education.



- Thomas, M. (2006). State of the nation: a coast-to-coast survey of the latest certification standards. *School Library Journal*, June, 56-62.
- Tsai, J. W. (2001). *Redefining roles and competencies of Library Co-ordinators in Singapore secondary schools* (Unpublished master's thesis). Nanyang Technological University, Singapore.
- U. S. Department of Education. (2002). *National center for education statistics: digest of education statistics 2001*. Washington: U. S. Department of Education, Office of Educational Research and Improvement.
- Wang-Chen, H. C. (1971). Welcome speech. *Singapore Libraries*, 1, 2-3.
- Watson, J. (1930). *Straits Settlements annual report on education for the year 1929*. Singapore: Government Printing Office.
- Wee, H. T. (1983). Forward. In Tan Chwee Hoon, (Ed.), *Handbook on school library organization and management* (p. 1). Singapore: Ministry of Education.
- Wiese, M. B. (1969a). Opening school library doors in Malaysia and Singapore. *ALA Bulletin*, 63(11), 1586-1595.
- Wiese, M. B. (1969b). Library manpower in school libraries. *Perpustakaan [Librarianship]*, 3 (1/2), 50-59.
- Wilkinson, R. J. (1900). *Annual report on education in the Straits Settlements for the year 1899*. Singapore: Government Printing Office.
- Wong, F. H. K. & Gwee, Y. H. (1980). *Official reports on education: Straits Settlements and the Federated Malay States*, Singapore: Pan Pacific Distributors Pte Ltd.