MEDIA RESOURCE LIBRARIES: CHALLENGES AND OPPORTUNITIES

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ABSTRACT

This presentation examines the important role of the school’s Media Resource Library (MRL) in the context of the emerging information society that is rapidly dawning upon us. It outlines six areas of challenges and opportunities for the MRL in meeting the needs of the schools in the new millennium. These include planning for the MRL to support education’s new focus, assessing and deriving an organizational structure for the MRL to ensure it meets current and future demands; developing the human resource training package and programme for MRL staff; developing and managing the MRL collection of materials; identifying ways to make the MRL the hub of educational and learning activities; and incorporating an MRL component in the school’s ranking system. A three-point basic action plan is subsequently proposed to address the major challenges and opportunities identified.

INTRODUCTION

The School of today is distinctly different from the School of the past. Rapid progress in technology is opening up new vista and bringing new challenges for both the students and teachers community. In Singapore schools, a prominent shift and move towards a combination of examination and extra-curricular excellence, IT know-how and computer literacy skills is clear for all to see. This is in line with the government’s emphasis change from a low-cost manufacturing economy (in the last 20 years) into a value added knowledge-based economy (in the new millennium) in an attempt to stay abreast with global trends and developments. The knowledge based society, the knowledge driven economy, or more simply, the information society, or information age are now familiar terms that acknowledges the new breed of knowledge worker who is able to add value to product and services and building the intellectual assets of the organization.
ROLE OF MRL IN THE INFORMATION SOCIETY

In moving towards and promoting the information society, many governments have put their efforts and focus on technology. The Singapore government has been continuously setting prominent examples in this regard. They have typically focused on increasing awareness of the potential applications (e.g., e-commerce); on improving the availability of and access to modern digital communications (e.g., Singapore ONE); and on encouraging people and organizations to use technology more effectively and efficiently (e.g., as evidenced by the number and frequency of such related articles in the Straits Times). They have encouraged and funded the development of skills to use technology—computer literacy (e.g., NCB’s or PSB’s programmes). Such focus and emphasis are important first steps in realizing an information society.

Nonetheless, it is also important to realize on the onset that technology in schools can best be used to support and enhance engaged learning. Schools no longer have the choice of not incorporating technology. Rather, the question is how well will they use it to enhance learning [Valdez, 1999]. Technology’s main purpose is therefore to improve learning and not to create a new content area. Technology cannot replace good teachers but instead enhances their abilities and creativity.

The Schools are tasked with the very important role in educating and training our new generation of students to become knowledge workers of the future, and thereby realizing the Singapore’s government vision of an “Thinking School, Learning Nation” paradigm.

Therefore, there is a need to logically progress from a technology focus to a focus on the content that flows through the technology (Oxbrow, 1998). In other words, we need to focus on information literacy (IL). This focus is aimed at information and knowledge—how to create it, manage it and use it. The Schools are tasked with this very important role in educating and training our new generation of students to become knowledge workers of the future, and thereby realizing the Singapore’s government vision of an “Thinking School, Learning Nation” paradigm. A knowledge worker is therefore clear about the inter-relationship of the “data → information → knowledge → wisdom” chain.

The Media Resource Library (MRL) will play a very crucial and central role in supporting this new age of education. ... Such emphasis is likely to be even more profound in the new millennium as the nation gears itself towards a truly information society … the HOD (IT cum MRL) position in the School is key and pivotal to make this happen.

The Media Resource Library (MRL) will play a very crucial and central role in supporting this new age of education. It is anticipated that such emphasis is likely to be even more profound in the new millennium as the nation gears itself towards a truly information society.
Thus, the HOD (IT cum MRL) position (with the support of the Principal, Vice Principal, library staff and all other teachers) in the School is key and pivotal to make this happen. Substantial effort and commitment is therefore needed in the development of the MRL. The MRL must become the hub of school activities in future!

OPPORTUNITIES AND CHALLENGES FOR THE MRL

The Demo, Phase 2 and 3 schools are at various stages of the technology focus. MRLs are currently (or have) been equipped with the necessary computing hardware, networked connectivity and Internet access. Schools lacking behind in this aspect can “catch up” rapidly as a result of other existing schools’ MRL models, vendor help, and emulation of other business organizations.

Using the managerial framework of planning, organizing, leading (motivating) and control, six main areas of opportunities and challenges for the MRL are identified and discussed:

(1) Planning for the MRL to support Education’s New Focus

The ground work for this is completed as evidenced by the existence of MRLs in schools, and the various documents prepared by the Curriculum Planning and Development Division of the MOE including the Library Instruction Programme (Primary), Information Literacy Guidelines, and Information Literacy Supplementary Materials, (MOE, 1991; 1997a; 1997b).

Much research work has been done, and ongoing research work is been done in the area of IL education and training in schools. Many schools and institutions have already explored some possible components that are combined into a coordinated multi-tiered approach to IL training and general education, both locally and abroad. Some of these techniques include the use of (The University of Arizona Library, 1999):

- CD-ROMs
- Course-Integrated Instruction
- Drop-In Workshops
- Handouts and Guides
- Kiosks
- Online Web-Based Instruction
- Stand-alone Courses
- Subject-Specific Instruction
- Tours
- Video Presentation

It would be prudent to closely and continually monitor these developments and update the framework of IL and general education in Schools.
Admission to the local Universities will be based on the students’ examination results, reasoning test, ECA and project work from the year 2003 ... we have no time to lose in gearing the MRL to support this new emphasis of education and training.

More importantly, there is a critical need for a mindset change and a whole fresh approach through all the ranks of the educators in the school system in order to make the transition from an existing examination focus into project work based focus. Thus, project work, both during the term time and vacation, would be an important feature in this new mode of education and assessment.

In fact, it has recently been announced that the admission to the local Universities will be based on the students’ examination results, reasoning test, ECA and project work from the year 2003 (Straits Times, 1999). In other words, we have no time to lose in gearing the MRL to support this new emphasis of education and training. Therefore, some serious planning and implementation must take place for this to happen.

(2) Assess suitability of the current MRL structure and ensure it meets current and future demands.

The organizational structure of the MRL is too important to be left to chance. Although autonomy in schools is desirable and useful, this has also led to different schools putting different emphasis on what is deemed important. A coordinated and agreed emphasis on the development of the MRL is critical in future.

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A uniform organization structure across schools for the MRL is desirable. This ensures that sufficient emphasis is placed on the MRL so that it becomes adequately staffed, resourced and developed. As such, there is an urgent need to review the roles of all the stakeholders of the MRL. This includes the HOD (IT cum MRL), the Library Coordinators (LC), Audio-Visual Coordinators (AVC), Media Resource Specialist (MRS), Teacher Librarians (TL), Library Officers (LO), Pupil Librarians (L) and Volunteers (V).

There is a need to take stock of the responsibilities of the different roles in the MRL set up and arrive at realistic time estimates that needs to be committed by these role holders in discharging their assigned responsibilities. Help in this area can be inferred through a study of existing models (in overseas schools who have already subscribed to such successful education programmes).

A high-level MOE committee or task force may be formed to carry out such a study, if this is warranted. And this is warranted! Even when this is not possible, schools
should be able to move their existing MRL organization into a more ‘ideal’ setup by emulating existing success models. Such a mode of operation is very common in business organizations. For example, organizations that aspire to be successful knowledge-based enterprises would study their successful leading competitors’ organizations very carefully, taking note of their organization structures, policies and guidelines, etc.

In many Australian, UK and USA schools’ norm... the HOD (IT cum MRL) or TL is the school’s information and resource specialist, with professional qualifications in both education and information science/librarianship.

Returning to the context of the school’s MRL, many Australian, UK and USA schools’ norm sees the HOD (IT cum MRL) or Teacher-Librarian as the school’s information and resource specialist, with professional qualifications in both education and information science/librarianship. He is directly accountable to the Principal and responsible for initiating and participating in the teaching of IL in the context of the school’s total curriculum, and managing the MRL’s information resources and services to facilitate learning and teaching. (e.g. [NSW Teacher Librarians’ Action Group, 1992], [Orana, 1996])

… if the MRL is to play such a critical role in tomorrow’s education success, new career tracks for teaching staff fulfilling these roles may need to be introduced.

A successful structure will necessitate a re-look at its policies and reward systems so that a re-evaluation and re-design (if necessary) of the ‘remuneration package’ for the stakeholders of the MRL forms part of this assessment. Therefore, if the MRL is to play such a critical role in tomorrow’s education success, new career tracks for teaching staff fulfilling these roles may need to be introduced. In fact, I would dare to advocate that the HOD (IT cum MRL) forms an important training ground for future Vice Principals and Principals. This observation stems from the fact that the MRL shall form the focal point of educational and project-based activities for almost all the subjects in the whole curriculum. Thus, subject heads and teachers are expected to work hand-in-hand with the MRL in developing courseware, assignments and assessments. On the part of the MRL, they will need to facilitate and support these new requirements through the development of the MRL resources and collections, and new library instructional programmes.

(3) Develop human resource training package/programme for existing and prospective MRL staff

Along with the idea of a revamped MRL structure and reward system for its stakeholders, it is also critical to recognize the important role of proper staff development to ensure that the MRL is staffed with trained personnel to handle to various functions of the MRL. This training encompass overall library management, staffing, facilities management, collection development and management (for both
print and non-print resources), library promotion and marketing, library programmes and services, information and financial management. In the emerging information society, there is a paradigm shift from ownership to access; just-in-case to just-in-time; intermediaries to end-users; stand-alone MRLs to networked-MRL services and resources, print-on-paper form to formless data, and the use of direct-manipulation interfaces. Learning by trial-and-error in such a novel environment can lead to undesirable (and potentially disastrous?) outcomes.

Proper and adequate training is paramount to successful MRL. In this respect, training encompasses both informal and formal training. Informal training should be viewed as stopgap training, acquisition of necessary skills and knowledge in a short period of time, or continuing education. The series of Library and Information Studies (LIS) course offered to HODs (IT cum MRL) are examples of such external training. Internal in-service training carried out by trained personnel can also be used to complement external training.

Proper and adequate training is paramount to successful MRL. … The Information Studies Division at NTU is currently working on the possibility of offering a one-year full-time M.Sc. (IS) programme in the near future, possibly from July 2000 to complement its existing two-year part-time programme. … This is an important programme for training of the HOD (IT cum MRL) and TLs.

A more important aspect would be formal training where participants are subjected to the vigor and rigor of formal programmes that cannot be obtained through informal training programmes. In Singapore, there are two main educational institutions that offer such formal training, namely, Temasek Polytechnic that produces LIS para-professionals; and Nanyang Technological University that produces LIS professionals and Information Professionals (IP).

Nanyang Technological University, through its Division of Information Studies, offers a two-year part-time professional degree programme. This Master of Science (Information Studies) programme (or M.Sc. (IS) for short) is geared at educating a new breed of Information Professionals (who would prove crucial in the truly information society) who are able to work in a range of information-intensive environments, including the school’s MRL. This programme, which started in 1993, has since been producing graduates to fill the many positions of the National Library Board and many other organizations.

The existing curriculum that was last revised in 1997, allows three areas of specialization. Students taking the four core subjects and four elective subjects are able to specialize in the three main areas of library and information science, information and knowledge management, and information services and systems development.
Teachers completing this programme will be equipped with the mix of pedagogical skills and LIS skills that are essential for managing the MRL and implementing the IL training and education in schools. Every school basically requires at least one or two teachers that have gone such formal training.

Teachers completing this programme will be equipped with the mix of pedagogical skills (acquired in their earlier teacher training at NIE) and LIS skills that are essential for managing the MRL and implementing the IL training and education in schools. Currently, there are already many teachers enrolled in this part time programme. Many of these teachers have expressed interest in doing MRL-related projects for their projects. This is important as they are tackling real issues that concern the schools, such as the information needs of schools, evaluation of MRL programmes and services, level of IL in schools, extent to which students’ needs for IL and information skills have been satisfied in schools, comparative studies to identify IL common policies and practices in schools, etc. As the completed dissertations are put online in the Division’s Web site (Division of Information Studies, 1999) for general access and use, they will become invaluable resources for consultation in future.

The Division is currently working on the possibility of offering a one-year full time M.Sc. (IS) in the near future, possibly from July 2000. At the same time, the Division intends to strengthen its existing programme further and ensure that it is compatible with the best programmes around the world, thereby making it the premier Information Studies training ground in the Asian region.

The Division is expected to supplement its existing specialization to especially include those of the School Libraries or MRL. Thus, subjects such as School Librarianship, Children and Young Adult Information Sources and Services (pegged at primary, secondary and pre-university student needs respectively), The Digital Library, Multimedia and Internet technologies, and so on, are potential new subjects that can be introduced to meet the formal training needs of teachers. Obviously, this will only materialize if there is sufficient show of support in this aspect of training.

I hope the learned members of this audience will be able to foresee the potential importance of our proposed full-time M.Sc. (IS) programme to the development of adequately trained manpower for running the MRLs efficiently, and would therefore encourage potential teachers to enroll in our course.

The Ministry of Education has an existing “Reimbursement of Course Fees” scheme that has an initial list of courses (that include M.A. (English), M.Ed., PGD in Chinese, Malay, English, History, Geography and Literature) that is looked upon to fulfill an area of need for the teaching service. I propose that the M.Sc.(IS) is an equally important programme, if not even more important than some of the programmes in the initial list, since every School basically requires at least one or two teachers that have gone such formal training to effectively manage and lead the MRL in future. I hope
the learned members of this audience will be able to foresee the potential importance of our proposed full-time M.Sc. (IS) programme to the development of adequately trained manpower for running the MRLs efficiently, and would therefore encourage the potential teachers to enroll in our course. On my part, I shall be more than happy to extend all sorts of cooperation in such an endeavor.

(4) Collection development and management

The collection of the MRL is critical to fulfill the role of the hub of teaching and learning activities of the school. On-line and electronic materials will swamp the information society in a big way. The future MRL will be equipped with a strong set of print material that is complemented by a set of equally strong digital library resources. The challenge is to effectively manage (including acquiring, maintaining, using and archiving) these resources of the future. Information overload is a now a common scenario facing many. It is therefore not surprisingly that HODs and TLs encounter difficulties in deciding what to buy for their MRLs. Close coordination with the subject heads, teachers and the MOE is necessary to ensure that the MRL is equipped with optimal resources.

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The MRL will also play an important supporting role to identify relevant material for selection and acquisition. Specific subject profiles can be identified and created. Selective dissemination of relevant and timely information (e.g. new book releases, AV materials, etc.) becomes important services to the MRL of the future. Thus, the subject heads, subject teachers, other teachers and MRL need to work as part of a team to continuous build up and develop the MRL collection. However, the teachers alone must not develop the collection in isolation. A focus on the real users needs (that includes the students!) and the client-centered approach to developing systems and services are also important factors for consideration.

(5) Identify and find ways to make MRL ‘a place to be seen’ and ‘a joy to use’

If the MRL is to succeed as the information and education hub of the school, a natural challenge and opportunity is to identify and find ways to make the MRL ‘a place to be seen’ and ‘a joy to use’.
Identify and find ways to make the MRL ‘a place to be seen’ and ‘a joy to use’... The MRL needs to be dynamic and innovative with bright ideas in the form of its collection, services, programmes and promotions. The MRL should exude an aura and ambiance that reflects the formation or presence of a thinking school.

The MRL must no longer convey the old image of a dusty silent room filled with obsolete or useless material that is manned by strict and unfriendly staff. It needs to be dynamic and innovative with bright ideas in the form of its collection, services, programmes and promotions. The MRL should exude an aura and ambiance that reflects the formation or presence of a thinking school where students are actively utilizing a host of resources (not necessarily within the confines of their own MRL) to complete their assignments and projects.

This calls for a paradigm shift in our mindset about school libraries. We need to realize that setting up, and efficient management of, MRLs can only be accomplished by a joint effort of the management, adequately trained HOD, TLs, teachers, and students.

There are numerous programmes and services that can be hosted by the MRL. Examples include debates, arts-and-craft fair, story-telling classes, coloring sessions, educational games, talks on books, cultivation of the reading habit, family reading groups, promoting various hobbies, computer appreciation, exhibitions on theme-of-the-month, and so on. Cultural activities such as theatrical performance, music appreciation, art and museum exhibitions are all possible programmes. Even in NTU, the annual Convocation Dinner is held in the NTU Library! The concept of eating among books makes it a memorable and interesting experience! This really shows the range of possibilities and potential for the MRL that are likely to be unexploited currently. As a side note, the location of the MRL is also important. No longer should the MRL be located in an obscure corner of the school but be centrally and prominently located for all to see and use; the location and appearance of the MRL should be inviting rather than gloomy and discouraging.

(6) Incorporate an MRL component in the schools ranking

Despite its advantages and disadvantages, the school ranking system is likely to stay. Instead of using a single composite rank, ranking in a different number of areas are likely to be more useful since it adequately highlights the school’s competencies in various areas.
If the MRL is truly that important for the school, then a MRL component can be incorporated in the ranks. Many MRL indicators and management statistics can be used to aid such an assessment. For example, this include:

- collection use analysis (e.g. circulation statistics, circulation history data, reservation statistics, etc.);
- use of MRL facilities (e.g. media resource rooms, discussion rooms, training rooms, equipment booking, use of computer terminals, etc.);
- searching (e.g. searching statistics, response time, searches in progress, etc.)
- collection development statistics (e.g. summary of orders, subject selection lists, desiderata reports, material notification, etc.);
- cataloguing statistics (online records used for cataloguing, catalog cards, bar coded labels, spine labels produced, etc.).
- financial statistics (fund control, fine reports, missing/lost books cost, etc.);
- system transaction (for automated systems only- activity log, error log, help log, database statistics, down-time statistics, etc.);
- vendor performance reports (orders placed and completed, pricing discrepancies, discount percentages, etc.);
- staff training (how many staff have M.Sc. (IS) qualifications?) and productivity statistics.
- level of inter-school and community libraries collaboration.

**Schools in the context of MRL should not be seen to be competing against each other. Rather, the challenge and opportunity is to make them more effective and complementary with each other in order to exploit resource sharing since it is not possible for individual schools to be fully equipped with all the desired resources to support the project-work approach in education.**

Ideally, schools in the context of MRL should not be seen to be competing against each other. Rather, the challenge and opportunity is to make them more effective and complementary with each other in order to exploit resource sharing since it is not possible for individual schools to be fully equipped with all the desired resources to support the project-work approach in education.

**Some form of a bigger master plan to develop the schools’ MRLs may be necessary in order to make them more efficient and effective. Schools may be tasked to develop different specialized collections that can be readily accessed by other schools and to form knowledge clusters around Singapore that are used to serve different user needs.**

This is the direct result of the paradigm shift to electronic networked resources and the funds that the MRL will have. Thus, a more important measure is to explore how well the school MRL can work with other information resource centers including the public and community libraries run by the National Library Board. Thus, some form of a bigger master plan to develop the schools’ MRLs may be necessary in order to make them more efficient and effective. Schools may be tasked to develop different
specialized collections that can be readily accessed by other schools. In doing so, we may be able to build up knowledge clusters around Singapore that are used to serve different user needs (including external users of school libraries). In other words, the whole concept of ‘information as the most important commodity in an information society’ must be ingrained into everyone and in all walks of life.

**Action Plan**

Based on these observations and proposals, a three point action plan that addresses the major issues and challenges can be developed.

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<td>1. Form high-level committee to review role and organization of MRL.</td>
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<td>2. Develop comprehensive training programme to ensure necessary skills and knowledge is acquired for effective management of MRL.</td>
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<td>3. Form task force to oversee deployment of networked MRLs to facilitate resource sharing and optimization.</td>
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This plan can form the basis for further deliberation and action.

1. Formation of a high-level committee to review the role and organization of the MRL, and its stakeholders in the context of the new education emphasis. This may include the institutionalization of a new career path for teachers to proceed through the ranks of the school hierarchy. Such a new organization and policy can be homogeneously implemented in all schools in Singapore.

2. Develop a comprehensive training programme to ensure that both informal and formal training is administered in order to ensure that necessary knowledge and skills are acquired for the management of the MRL. This includes identifying the relevant training avenues and formal courses, and to transmit a clear message to the teachers of the need and relevance of the training (through schemes such as the Reimbursement of Course Fees or support through No Pay Leave).

3. Formation of a task force to oversee the deployment of networked MRLs to facilitate resource sharing and optimization. This is especially applicable in the context of the very expensive electronic resources. This will directly influence the collection development policies of individual MRLs so that it fulfills the role to support individual school’s special needs and core needs of the national curriculum.

In the new millennium, we are likely to see a substantial focus change from computer literacy to information literacy... The MRL plays a critical role in schools to develop and impart this training to our current and next generation of students.

**Conclusion**

The information society is the future! This society requires both the important ingredients of computer literacy and information literacy. Singapore is not far from
achieving the first. In the new millennium, we are likely to see a substantial focus change from computer literacy to information literacy. Information professionals will be much in demand in the 2000s as IT professionals have been in the 1990s. The MRL plays a critical role in schools to develop and impart this training to our current and next generation of students. There is no time to lose. There is an urgent need to prepare yourself and your staff for this future.

In an information age school ... both students and teachers will be familiar with the need to ask productive questions, gather data of all kinds, synthesize, analyze, interpret and evaluate information in all its forms. There will be more coaching than teaching as teachers recognize the importance to arouse curiosity, ask the right questions at the right time, stir up debate and serious discussion... Learning will also be more self-initiated.

In closing, I draw your attention to the definition of an information age school that is distinctively different from the traditional school that most of us are used to. In an information age school (ALA Presidential Committee on Information Literacy, 1991), there will be more interactions as students pursue questions of personal interest, interact with others students and teachers. Both students and teachers will be familiar with the need to ask productive questions, gather data of all kinds, synthesize, analyze, interpret and evaluate information in all its forms. There will be more coaching than teaching as teachers recognize the importance to arouse curiosity, ask the right questions at the right time, stir up debate and serious discussion. With a vast array of information resources, learning will also be more self-initiated.

MRL staff, when fully trained, will be valued for their information expertise and technological know-how. When coupled with their pedagogical skills, these staff (teachers) becomes the catalyst for change and eventual leaders of schools.

MRL staff, when fully trained, will be valued for their information expertise and technological know-how. When coupled with their pedagogical skills, these staff (teachers) becomes the catalyst for change and eventual leaders of schools.

My challenge to you is to develop your schools and MRLs into an information age school, and to the extent where it does not matter to any parent as to which school should they send their children for their education. They would know that their children are receiving their best education that is supported by an integrated networked of highly effective information age MRLs.

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An online version of this paper can be found at the author’s Web site: <http://islab.sas.ntu.edu.sg:8000/user/schubert/> under Publications – Education/Training. This may be freely circulated as a white paper for discussion.

References


