

Developing strategies to create information literate Thai students

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Abstract:

Purpose – This article aims at developing strategies to create information literacy skills among the Thai students and studying the results of the strategies through implementation.

Research methodologies - Documentary research, focus group interviews, interviewing, and quasi-experiment were used. Key informants included resource persons in the field related to information literacy, school administrators, teacher-librarians as well as groups of teachers, students from two selected schools. Data was analyzed using content analysis, IOC and presented descriptively with charts.

Findings – Strategies to create information literate students were presented in the form of a model called "Five alliances to create information literate Thai students." The model comprised the strategies to be adopted by the government and related ministries, local administrations / educational subdistrict areas, schools, families and community, and mass media.

Teacher- librarians play important roles in conducting library activities and have been seen as partners with subject teachers in integrating information literacy in the curriculum especially in the teaching learning process to promote students' information literacy skills.

Research limitations/implications - The research and development of the information literacy self –training package for teacher –librarians is needed to enhance teacher –librarians' roles in enhancing the information literacy skills among the Thai students.

Practical implications - The strategies developed can be put into practice at school and national level by all stakeholders especially policy makers, teachers and teacher-librarians.

Original value of the paper - This paper offers original theoretical based framework model that can be put into theory and practice in the development of information literacy skills among the school students in the Thai context.

Keywords: Information literacy, Information literate students, Thai students

Paper type: Research paper

Introduction

Information literacy skills are the core competencies of individuals especially students in the 21st century due to the driving force of information and communication technologies, a prime mover for change that result radical changes in the society, affecting individuals and organization, both positively and negatively. As for education, new challenges are being faced to connect people to the learning process in new and different ways, new learning environment, new learning strategies and the emerging new learners. Learning in this century is considered to be a lifelong process, the means to cope with continuous changes. There has been a shift away from the teacher-centered approach to learner-centered, from know what to know how and an increased emphasis on information literacy to enable learners to become more self-directed, and to simulate greater control over their own learning.

Information literacy (IL) is interpreted as one of the many literacies. Information literacy is described as the overreaching essential for 21st century living, the foundation for learning in our contemporary environment of continuous technological change (Bruce, 2004: 1), a survival skill in the information age (American Library Association 1998), essential skills for workers to survive in a knowledge-based society (Education and Manpower Bureau, Hong Kong, 2005), the basis for lifelong learning and common to all disciplines, to all learning environments, and to all levels of education. (Association of College and Research Libraries, 2000). Some have utilized alternative phrases or subcategories such as 'information competency' 'information skills', 'computer literacy', 'technology-related literacy', 'digital literacy', 'library skills', 'research skills', 'study skills' which is not the same although there is a strong relationship among all these concepts and each of these literacies requires some level of critical thinking (Humes, 2003).

To keep up with significant changes in school environment, new learners' key competencies and desirable characteristics are important. A successful learner is one who has learned how to learn (Nisbet and Schucksmith, 1986: vii). Through learning how to learn, emphases are on creating information literate students to enhance competent learners, independent learners, more self-directed and lifelong learners to meet the challenges of globalization and

the new century. According to the American Library Association (1989), to be information literate, a person must be able to recognize when information is needed and have the ability to locate, evaluate and use effectively the needed information.

In Thailand, the National Education Act 1999 and amendments made in 2002 serves as a master legislation on education of the country leading to significant education reform. Learning reform by attaching highest importance to learners is the most important one. Some guidelines in the Act which called upon the need for information literacy among Thai learners the development on learner-centred teaching – learning process, with the desirable characteristics of learners in the acquiring thirst for knowledge, capability of self-learning on a continuous basis, lifelong learning, learning at all times and in all places. In addition, the Tenth National Economic and Social Development Plan (2007-2011) emphasizes the need for capacities, skills and basic knowledge essential to their future lives, leading to sustainability in national development (Office of the National Economic and Social Development Board, Thailand, 2006). Such priorities are consistent with the Basic Education Core Curriculum 2008 of the Ministry of Education, Thailand (2008) in the development of learners' quality at basic education level towards the 21st century, with its vision of the learner- centred approach, endowed with basic knowledge and essential skills and favorable attitude towards further education, livelihood and lifelong learning, all are capable of learning and self-development to their highest potentiality. The second of its five goals is knowledge and skills for communication, thinking, problem-solving, technological knowhow, and life skills. Learners' key competencies are communication, thinking, problemsolving capabilities, and capacity for applying life skills and for technological application.

Literature review showed that, many organizations and professional association both at the national and international level play active roles in mobilizing information literacy in various ways. An extensive research studies and articles related to information literacy are also published in both print and electronic media especially in the western countries as well as in Asia and Oceania. Information literacy standards, guidelines and indicators have been developed worldwide at the international level by IFLA and at the national level especially the United States of America, while some in Asia and Oceania, e.g. Information Literacy Guidelines (The Ministry of Education, Singapore, 1997) as well as a proposed 6+3 Model for Developing Information Literacy Standards for Schools in Singapore (Moktar and others, 2009), Information Literacy Framework for Hong Kong (Education and Manpower Bureau, Hong Kong, 2005). In Thailand, there is an awareness of information literacy in Thailand especially at the educational environment. Many research studies, and but there is lack of policy, standards and strategies projects have been conducted directly to information literacy. A proposed "Six -Know Model" for Thai students at school levels has been developed (Sacchanand, 2011), and the needed strategies to create information literate Thai students has been proposed to put into action. It is significant in that the model developed can provide information and insights that will make a positive impact on information literacy in the school system. In addition, policy makers and school administrators can apply a set of recommendations from this research study to formulate policy that would be beneficial not only for the enhancement of information literacy skills among the Thai students, but also to teachers and teacher-librarians as a whole. From a broad research perspective, this study serves as an input to the research related to information literacy and teaching and learning process at the school level that is still very few. This study also adds to the literature and body of knowledge relating to the information literacy and information literate students within the context of school system in Thailand.

Purpose

This research study was undertaken with an aim to develop strategies for developing of information literacy skills among the Thai students and studying the results of the strategies in the implementation.

Specifically this research study tried to answer the following questions:

- 1. What should be the strategies to enhance information literacy among the Thai students?
- 2. What were the results of the implementation strategies in two selected schools?

Literature review

A lot of research studies on information literacy have been conducted worldwide but not many in the Thai context especially at school levels. Specifically the development of information literate students at school levels, there is one related project in English "Development of information literacy through school libraries in South-East Asian countries," conducted by Singh and others (2005) and funded by UNESCO office in Bangkok that also cover Thailand . The related important findings from the surveys in the seven countries showed that primary teachers have the greatest awareness of information literacy even it is accorded varying degrees of importance. Implementation of information literacy showed disparity across the region. Where it is taught, it is integrated into courses and/or taught as an orientation in the library. School libraries and teacher- librarians seem to play a small role in teaching information literacy. Information literacy is taught by teacher librarians as a part of extra-curricular activities. Lack of qualified teachers, librarians, computers and insufficient library collections are cited as the main factors preventing the teaching of information literacy. Some major opportunities for information literacy promotion and implementation which differed from one country to another were: curriculum reform that opens an opportunity for IL to be integrated into the new curriculum; government policy that gives priority to the creation of a knowledge society; availability of ICT infrastructure, facilities at the school level and free ISP for schools; parents and communities that take an active role in their children's education.

There are many strategies to enhance information literacy in primary and secondary schools and to create information literate school students in Thailand. Research studies showed major factors as partnership between teachers and teacher-librarians (Saourayawiset, 2009), the resource-based learning (Taweechart, 2002), the influence of mass media (Saourayawiset, 2009). In addition, it was found that teacher-librarians play significant roles in information literacy instruction, with a separate library class and unofficial library instructions, advisory services on learning resources and information retrieval, even though most teacher librarians do not have true understanding of what they are teaching. (Songsaengchan; Chansawang and Prapinpongsakorn, 2009).

Two proposed models to create information literate Thai students and to develop the information literacy skills among the school students in Thailand, as results of research studies were: "SF2S Model"---Students, Families, Schools, and Social Institutions. (Saourayawiset,2009) and the information literacy model based on concepts of NET: Networking, Edutainment and Tailor-made, was comprised of the enhancement of administrators' understanding, the teachers' information literacy training, and the information literacy resources support (Ratanaubol, 2008).

Research methodology

Documentary research, content analysis, survey research using focus group discussions, questionnaires, interviewing, and also quasi experiment were used as research methodologies to collect both quantitative and qualitative data for this study.

The development steps were as follows:

- 1). Extensive review of related literature on information literacy standards, guidelines, frameworks and development of information literate students was conducted. The data was primarily collected from various sources, e.g. papers presented at the national, regional and international library and information conference, articles published in regional and international journals in the field of library and information science and education as well as websites of the professional and academic associations. Content analysis was adopted, leading to the first draft model to create information literate Thai students.
- 2). Focus group discussion was first used with the group of twelve key informants; purposive sampling selected from school teachers, teacher-librarians, administrators and university faculty who have experience related to information literacy at school level. This step is to brainstorm the idea on the draft strategies proposed by the researcher and came up with a list of items.
- 3). A questionnaire comprised the list of items of strategies to create information literate Thai students was sent to twenty three purposive samples of teachers, teacher- librarians, school administrators, supervisors and those with experience in information literacy at school levels. The sample was also stratified by school size and geographical area. This is to find the content validity and the Index of Congruence.
- 4). The second focus group discussion was conducted with seventeen key persons purposively selected from those who have authorities or involve with policy making in relation to information literacy at school level, school directors, educational supervisors, representatives from the Ministry of Education, the local authorities, mass media, academicians and professors. This is to pinpoint their idea in the high level position view and react with the analysis of the IOC on the draft strategies. The strategies to create the information literate Thai students were finalized.
- 5) The quasi-experiment was conducted by selecting two proposed strategies to try out. The first is the integration of information literacy into the school curriculum, course content and teaching-learning process. Collaborative partnership between teachers and teacher-librarians were thus strengthened. Another is the library activities to enhance information literacy organized by teacher-librarians.

Two public schools, one in Bangkok and another in the province, were purposively selected geographically. The teacher-librarians in these two schools had library science background and the experience in the integration of information literacy in the teaching and learning process. This was to test the results of the use of the two selected strategies during a two-months period. Key informants were teachers in history and in science, teacher-librarians, school deputy directors who supervised academic affairs and students who studied in history and science class. The research process comprised of developing the lesson plan that integrated information literacy in one module of the subject course through collaborative partnership between teachers and teachers-librarians; collaborative teaching between

teachers and teachers-librarians using resource-based teaching and learning techniques; the pretest and posttest as well as students' satisfaction survey were conducted with students.

The research instruments included the lesson plans that integrated information literacy in the history course for higher secondary school levels and in the science course for lower secondary school level, the pretest and posttest , the evaluation forms, the interviewing form, and questionnaires. The researcher matched the pre and post test scores of each student to analyze the learning achievement.

Semi-structured interviews were developed to investigate in-depth information from school directors and teacher—librarians. The interviews were conducted with two school deputy directors for academic affair who are in charge with the supervision of school teaching and learning process and school libraries, and with two teacher—librarians of the schools that were used to try out the implementation of the strategies developed. This step is to learn about the vision and the policy of the schools related to the implementation of information literacy and the development of information literate students in the point of view of the school administrators; the roles and practices of teacher—librarians in enhancing the information literacy and information literate students and factors that promote and hinder the implementation of information literacy, problems and obstacles.

Data Analysis

The data were analyzed by using content analysis and percentage.

Findings

Strategies for the development of Thai information literate students—were presented in the form of model called "Five alliances to create information literate Thai students Model." The model comprised of strategies to be adopted by the government and related ministries, local administrations / educational sub-district areas and to schools, families and community, and mass media as presented in Figure 1 and as for student—centered focus model presented in Figure 2.

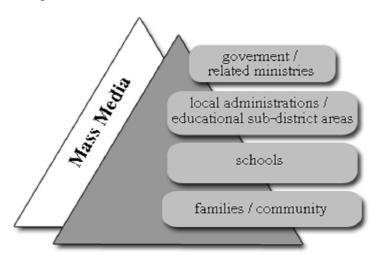


Figure 1 Five alliances to create information literate Thai students Model

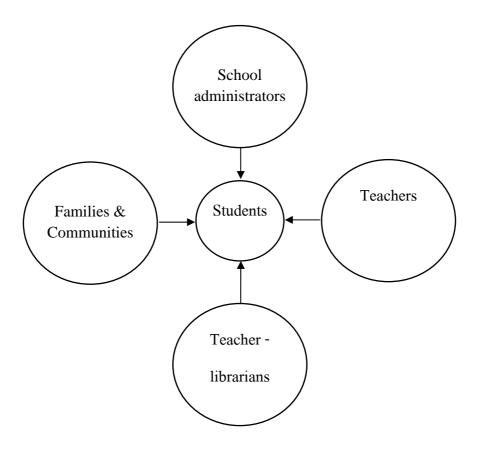


Figure 2

Collaborative partnerships of all stakeholders in creating information literate students using student-centered model

Results of the strategy implementation in the two selected schools, one in Bangkok and another in the province showed that students have better information literacy skills. Students, teachers, teacher- librarians and school administrators understand the importance, need and benefits of information literacy to learning and living, especially as a teaching and learning process that can be integrated into all the subjects and library activities. However, it was found that the term of information literacy in Thai Language, and also the concept or information literacy or information skills are not commonly recognized among school administrators and teachers, and they always refer to computer literacy.

Integrating information literacy in the curriculum, subject course study and teaching learning process is one important strategy to create information literate students and enhance information literacy in the school environment. Together with this is the collaborative partnership between teachers and teacher-librarians especially in the teaching learning process to promote students' information literacy skills.

Teacher- librarians play important roles in conducting library activities and have been seen as partners with subject teachers in as well as school libraries or learning resource centers which are under going profound changes, and also need new vision and strategies to develop new desired characteristics of the knowledge-based economy school students.

Discussions

- 1. The strategies developed to create the information literate Thai students in the form of model is in accordance with the two previous proposed models of Ratanaubol (2008) and Saourayawiset (2009) which focused on the roles of families, schools, and social institutions as well as the enhancement of administrators' understanding, the teachers' information literacy training, and the information literacy resources support. However, the model developed in this research study proposed new focus on the mass media which have wider and great impact in the Thai information society and worldwide.
- 2. The strategies developed to create the information literate Thai students were set to be driven under student-centred information literacy development, in accordance with the National Education Act 1999 and amendments made in 2002 and the Tenth National Economic and Social Development Plan (2007-2011) in the development strategies of developing human resources to promote life-long learning, developing the learning habit from the early stage in life, the thirst for knowledge and capability of self-learning on a continuous basis, to promote lifelong learning society with one strategy to develop a family community and social environment that is conducive to human development and in accordance with economic and social changes and to prepare the people and community to be resilient to changes. Thus will lead to the development of sustainable and social development.

The proposed strategies and development model will help fulfill the development of learners' quality at basic education level towards the 21st century in its vision, goals, and key competencies as appeared in the Basic Education Core Curriculum 2008 of the Ministry of Education, Thailand. In addition, according to the guidelines for managing educational management

- 3. The idea of partnership or cooperation with all parties or stakeholders as suggested strategies of this research is in accordance with the national educational guidelines in organizing the learning process in section 24 which enable individuals to learn at all times and in all places. Success in implementing the information literacy strategies to achieve the established goals depends highly on the concerted efforts of all the parties concerned at all levels. Co-operation with parents, guardians and all parties concerned in the community shall be sought to develop jointly the learners in accord with their potentiality.
- 4. As found by Singh and others (2005) a number of major opportunities for information literacy promotion and implementation in Southeast Asian countries differed from one country to another. In Thailand, the national education act, plans, government policies especially educational and curriculum reform and new vision of lifelong learning that opens an opportunity for the integration of information literacy are all considered as opportunities.

Research implications

In the knowledge-based society, information literacy is a national and international concern. It also should be a concern to all sectors of the society and should be tailored to specific context and needs. A school-based implementation of the information literacy strategies should be considered. Teachers should be prepared with knowledge and skills not only in subject taught but also in information literacy. Information literacy should be integrated in all

curriculum development and course development by clearly outlining where the skills are actively developed.

The fact that information literacy is applicable in all disciplines, involves metacognition, and is a way of thinking combine with a set of skills (Weiner, 2010). The goal is to prepare students early on to "learn how to learn." The researcher recommended further longitude research studies to be conducted on the impact of collaborative partnerships between teachers and teacher librarians in the school level especially in the teaching/learning process, as well as the roles of school libraries and librarians in the teaching and learning process and in the development of information literacy skills and become information literate students. In addition, the research and development of the information literacy self training packages for teachers and for teacher –librarians are needed to enhance teachers and teacher – librarians' knowledge, competencies and roles in the development of the information literate students. This is in agree with the suggestion of Songsaengchan, Chansawang & Prapinpongsakorn (2009) in the need for profession development of school teachers and teacher-librarians in information literacy.

Practical implications

The strategies developed can be put into practice at school and national level, for all stakeholders especially policy makers, teachers and teacher-librarians.

Concerted efforts among teachers and teacher-librarians, and stakeholders in the implementation of the strategies should be forged and strengthened.

Strategies should also be well selected, well planned and clearly identified so that they will suit the real needs of students and the real environment.

As for teacher-librarians, they should expand more new important roles in the new environment especially as facilitators, collaborative partners in the teaching and learning process. Continuing professional development should be conducted for teacher-librarians and teachers in changing teaching strategies and using information and communication technologies.

The success of the information literacy strategies implementation depends greatly on the public sector: governments, relevant ministries, local administrations / educational subdistrict areas and schools as a "driving force" with the school library as one key player. With its mission and goals to support the teaching and learning for all and to equip students with lifelong learning skills, the school library should be acknowledged, maintained and also supported with specific funding as being integral to the educational process and essential to every long-term strategy for literacy.

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