



The Conceptions of Information Literacy (IL) Education Implementation Among Public School Teachers

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Abstract. Information literacy (IL) education in Malaysia is officially integrated into the school curriculum. However, it seems that the development and progress of ILE implementation are slower than might be expected. Thus, the goal of this qualitative study is to determine the factors affecting the implementation of IL education in Malaysian primary schools and to explore how these factors are facilitating or hindering the process. Case studies were conducted involving two national primary schools representing one of the two public school types in Malaysia. In-depth, semi-structured interviews were held with school teachers and key stakeholders followed by documentary analysis for further understanding of the implementation issues emerging during the implementation. From the analysis of the transcripts of the interviews with teaching staff, a range of factors hindering and facilitating IL education implementation has been identified. Interview data shows that most participants had positive attitudes towards IL education. They believed that IL education was important and had the potential to make teaching and learning activities more engaging and fun. However, the participants also reported that there were problems in implementing ILE; these problems seem to be associated with the school ecology.

Keywords. Information literacy education; Implementation; National-type schools; Teachers

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1. Introduction

The 21st century learning is now well-accepted within our Malaysian education system (MES). This type of learning environment promotes critical thinking, problem solving, collaborative learning, adaptability, entrepreneurship, effective communication, and information literacy (IL) skills. Thus, IL is well-fitted within this kind of learning environment. IL, as defined by the [1] as the ability of an individual to “recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information”. IL is also viewed as a ‘survival skill’ in the 21st century because IL enables individuals to find and use information to perform any task, to make decisions and to prepare them for life-long learning [2].

In fact, the concept of life-long learning has been repeatedly coupled with IL in many key papers (e.g. [3–5]). Since MES aspires to equip students with the necessary learning and thinking skills through the use of ICT and information resources in the classrooms, in the library or media centre, and in any other school facilities, the promotion of IL activities is critical by encouraging teachers and students to be involved in planned learning activities that incorporating the resources and the collections from the school resource centre (SRC). However, it seems that the development and advance of IL education and its implementation are slower than expected.

This paper provides a brief overview of the introduction to the research problem, a definition of IL, a review of fundamental research on ILE, the research goal, its methodology, and its theoretical grounding. Then, I report and discuss the findings of one of the four case studies, followed by the concluding section. The pseudonym given to the case study school is Keris.

2. Defining Information Literacy

Since the seminal work on IL in 1989 [1], its definition has been discussed and debated in various conferences and workshops. Although IL definitions have spread out and varied due to the development in the field, none of the IL definitions fit all societies. [6] pointed out that the IL dilemma is not because of the uncertainty of its definition, but because of the difficulty of its execution.

For the purpose of this study on IL education in developing countries, [7] operational definition of IL as follows is adopted because it suits the context of study:

The ability of individuals or groups:

- To be aware of why, how, and by whom information is created, communicated and controlled, and how it contributes to the construction of knowledge;
- To understand when information can be used to improve their daily living or to contribute to the solution of needs related to specific situations, such as work or school;
- To locate information and to critique its relevance and appropriateness to their context;
- To understand how to integrate relevant and appropriate information with what they already know to construct new knowledge that increases their capacity to improve their daily living or to resolve needs related to specific situations that have arisen [7].

It must be recognised that an individual’s IL skills will develop over time through practice, much like literacy itself.

3. Research on IL Education

Numerous studies have examined the factors affecting IL at school [5, 8–13]. In this study, five types of factors have been identified in the research literature: the principal factor, teacher factor, teacher librarian factor, learner factor, and social and cultural factor. Thus, given the different types of factors identified, it seems likely that the school culture is an important aspect to facilitate IL instruction. The few references to IL education progress in education sectors worldwide have scarcely discussed the school culture as a motivating or inhibiting factor in IL education. Attempting to identify individual factors such as the principal factor or teacher factor or learner factor seems to be the focus of most studies of IL in schools [14, 15].

Little research was found that discussed issues pertaining to school culture and leadership in IL education in Malaysia. In fact, references to IL initiatives in Malaysia were quite rare, particularly about the primary education. In general, the IL studies in Malaysia found three factors that affect ILE integration into the education system: (a) characteristics of the implementation system; (b) characteristics of the implementers; (c) characteristics of the setting [15–19]. These studies were of a quantitative style, using survey and questionnaires. Countless of the IL-related studies in Malaysia were carried out at higher education institutions and secondary schools, with few focused on primary education.

4. Research Goals

IL education appears to be something that policy makers, educators and librarians in Malaysia believe to be important [20–23]. However, several studies have found that IL education did not appear to be implemented in most Malaysian primary schools for the above said reasons [5, 8–15]. Another possible explanation is the lack of recognition and support for IL education within the Ministry of Education (MoE)'s official documents [24].

It is clear that there is an inconsistency between the claims made by the MoE's official and the research evidence. The possible factors that affect IL education implementation are also uncertain. Thus, the goal of this qualitative study is to determine the factors affecting the implementation of IL education in Malaysian primary schools and able to understand how these factors are facilitating or hindering the process. Evidence from the study will be able to assist in the development of a better training program in the teaching and learning of IL.

Methodology

We employed the methods and procedures of the qualitative research tradition, within an interpretive philosophy. The interpretive paradigm was chosen in order to produce meaningful insights into the research problem, which is hardly understood. In this research, four primary schools representing different school types in Malaysia were used as case studies. In-depth, semi-structured interviews were conducted with school teachers and key stakeholders along with the gathering of documentary evidence for additional understanding of issues emerging during IL education implementation.

[25] interactive model (1994) of data analysis was used as a guide. Analysis of the data took the form of examining the transcriptions of the recorded interviews and extensive notes and documents acquired during the data gathering. The data were then coded and matched against

the preliminary model and elements of IL education implementation of Malaysian primary school that was utilized to guide this study.

Theoretical Grounding

We based the preliminary model on three theories (see Figure 1): Hall and Hord's Concerns Based Adoption Model (CBAM) [26], Chen's Action Model [27] and Fullan's Theory of Educational Change [28]. We chose CBAM to provide a guide to identify the stages of implementation and factors affecting the implementation within the schools. The other two theories were selected to identify and understand factors internal and external to the school ecology, that is, the school micro and macro environments. Also incorporated into the model were other factors identified from the literature, such as teachers' lack of time and resources.

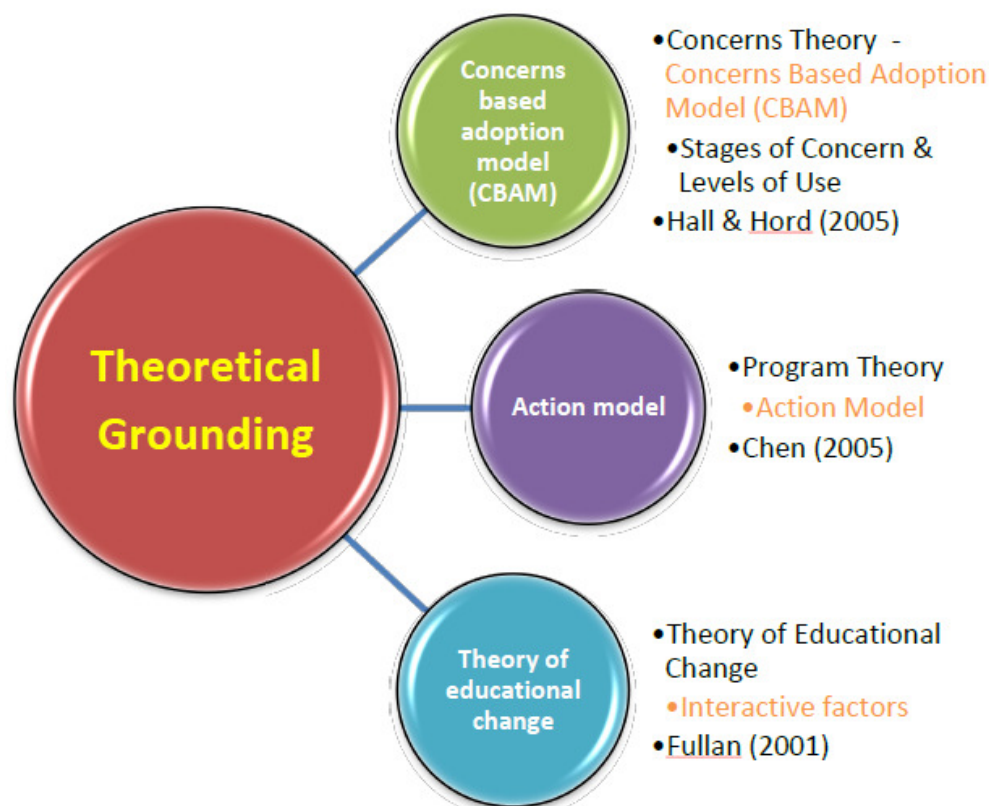


Figure 1. Three models used in the preliminary model of IEducation implementation in Malaysian primary schools

5. Findings

In this study, the factors affecting IEducation implementation are identified and examined in relation to the stages of implementation to determine how the factors are affecting the implementation process. The following discusses the findings of factors in Keris [8].

Case 1: Keris School

Keris School is the first case study of the research, and is named after a Malay traditional weapon [8]. It is situated on the northern rural area of the state. The medium of instruction

is the Malay language. Five participants were the school head and four teachers who were purposively selected, with input from the school head. These teachers were the people who seemed to be using the constructivist approach to teaching and learning and, therefore, were more likely to be aware of or to incorporate IL in the classroom. Also important of course were their willingness and availability to talk.

Stage of ILE Implementation

The stage of ILE implementation was assessed from the individual interviews, namely with the Senior Administrative Assistant (SAA) who substituted for the new school head, the science teacher, local studies teacher, religious studies teacher and library and media teacher (LMT) [8]. Based on the interviews, the interviewees seemed to have attempted to teach ILE to the students when it was first introduced. But, due to the complexity of its implementation, at the time of this study, Keris appeared to be only at the early implementation phase of IL education, that is, at least one teacher or LMT was preparing him or herself for implementing IL education (e.g., by attending an in-service course).

Factors affecting the ILE Implementation

This section discusses the factors impeding or facilitating IL education based on the stage of its implementation in Keris. We divided the section into four parts: (a) characteristics of IL education; (b) individual implementers; (c) implementing organisation (school); and (d) ecological context.

(a) Characteristics of IL education

When asked about the need for IL education, four interviewees viewed IL education as essential to the teachers and students [8]. The interviewees had different views on the importance of ILE. Science and local studies teachers indicated that ILE provides opportunities for the students to gain knowledge from outside of the school syllabus and the LMT saw IL education as a meaningful learning process, particularly with the introduction of ICT and the multiplicity of educational resources. On the other hand, the SAA was not interested in implementing IL education in her classroom.

(b) Individual implementers

When asked about IL training, all interviewees stated that they had not attended any [8]. They said that they knew about IL education through attending IL related courses during pre-service training, and during 'early years' as a teacher or as a LMT. It appears that none of the interviewees had IL training, which led to a lack of IL knowledge and skills for implementing IL education in the classroom. In addition, when asked about their teaching practices, the answers varied. I found that those interviewees who had more than 10 years of teaching experience chose the teacher-centred approach compared to those who had less than 10 years of experience. The religious studies teacher, for example, though she believed that IL education was important; she expressed difficulties in implementing IL education because she felt she lacked control over her students. On the other hand, the junior teachers preferred to use a student-centred approach, an approach that is suitable for ILE implementation.

(c) Implementing organisation (school)

All interviewees, when asked about the administrative and leadership support for IL education, were concerned about the lack of availability of resources and equipment to support them in their teaching and learning, and the lack of service and maintenance of the school equipment and facilities due to the limited funding [8]. However, the interviewees said that the school administrator was supportive in all school activities including IL education.

When asked about IL education in their teaching and learning, most interviewees indicated that they were not in a position to implement IL education all the time because they had to finish the syllabus and prepare their students for exams [8]. They said that the academic results were the yardstick to the school performance. Another hindering factor was large class sizes. The standard class size in Malaysian schools is about 40 to 50 students. According to the SAA, it was difficult to implement ILE in such a large class. The LMT also commented on the lack of reading habits among the students. She saw it as an obstacle to IL education implementation. Another interesting view that came from the science teacher was a perception that 'a quiet class is a learning class'. This perception among teachers could be an obstacle to the implementation of IL education. To the teachers, a quiet class is likely one in which students are expected to be dependent and passive in learning.

Thus, factors such as lack of funds and resources, lack of time, heavy workload, lack of technical support, and requirements to meet school or academic targets affected the readiness of the interviewees, and thus, hindered the IL education implementation in Keris.

(d) Ecological context

When asked about the support of the local community, the interviewees said that parents were the closest members of society to the school [8]. Most parents, according to the SAA, were from uneducated background, but they had similar expectations of the school. According to the science teacher, most parents want their children to get mostly As in their exams. However, SAA believed that because of their low socio-economic backgrounds, the parents were not much involved in the school activities. The school had strived to achieve the highest examination results. Thus, all efforts were done towards achieving this target. It was felt that the parents had the same expectation as the school to achieve better exam results. When questioned about the expectations of the other two levels of education administration (district and state), the science teachers claimed that both administrations were also results-oriented. Many extra programmes at school such as enrichment programmes were organized in order to achieve the target levels. Hence, teachers had heavy workloads and limited time to concentrate on teaching and learning as well as implementing IL education as was hoped by the MoE.

6. Discussions

The factors affecting the implementation of IL education in Keris that were identified in the interview data were very much related to the individual, organisational, social and cultural factors. Three themes emerged from this school: (a) risk taking versus risk aversion; (b) out-of-school support versus in-school support; and (c) shared understanding versus individual perception [8]. In Keris, we found that two factors, i.e. time and examination practices hindered the interviewees from being risk takers. As for school support, Keris participants had proper

in-school support, but they still needed outside of school support to further assist them in IL education. In terms of the need for IL education, most interviewees were not confident enough to implement it because individual perceptions such as the one held by the SAA. She was supposed to lead and provide direction for IL education but was not interested enough to implement it in the school. Thus, Keris still needed to develop a shared sense of the importance of IL education to achieve the aim of the MoE.

7. Conclusions

Drawing from the issues discussed above, a range of factors hindering and facilitating IL education implementation was identified in the interview transcripts. The data showed that most interviewees had positive attitudes towards IL education [8]. They believed that IL education was important and had the potential to ensure that teaching and learning activities more engaging and fun. However, the interviewees also reported that there were problems in implementing ILE; these problems seem to be associated with the characteristics of IL education itself, the school as an implementing organisation, the individual implementers and the school ecology. The findings above are from just one case study. The analysis of the other three cases will provide further insights into the problem being discussed in this study.

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Competing Interests

The authors declare that they have no competing interests.

Authors' Contributions

All the authors contributed significantly in writing this article. The authors read and approved the final manuscript.

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