Implementing Information literacy into Israeli primary school teaching and learning processes: A case study/ Sigal Ben-Amram

ABSTRACT

'Information Literacy' (IL) refers to the set of skills necessary to identify, locate, evaluate, disseminate and integrate information from various sources. Information literate people are those who have essentially learned how to learn, and how to best utilize what they have learned. They know how information is organized, how to find the information they need, and how to apply it toward further learning. Today Information Literacy is considered to be one of the most essential skills for life in modern society. There is an ongoing academic debate among educators in many countries as to how to best integrate Information Literacy into the curriculum and how to link it with other literacies, such as 'Technological Literacy', 'Digital Literacy' and 'Media Literacy'.

In 2010, the Israeli Ministry of Education initiated in certain elementary schools an Information Communication Technology (ICT) educational program titled: 'The National Program – Adapting the Educational System to the 21st Century'. The program sought to use ICT to promote 'innovative pedagogy' by integrating technology into teaching-learning-assessment processes. Schools that joined the program committed, among other tasks, to develop online lessons and to integrate computer and Information Literacy skills into the curriculum. Official guidelines issued by the Ministry of Education specified the specific information skills students were expected to acquire.

The purpose of this study was to explore the status of Information Literacy teaching and learning in elementary schools in Israel. The study used the case-study method, employing a combination of quantitative and qualitative methods (Mixed Methods design). A comparison was made between an elementary school that joined the ICT program in 2011, and a socioeconomically matched elementary school that did not participate in the program, but offered its students similar information technology resources.

Prior to the data collection, the ICT program documents were analyzed in order to understand what was required of both teachers and students regarding Information Literacy and computer skills.

Data collection at the schools began in November 2014, and ended in March 2015. A total of 18 teachers and 263 students, aged 11-12, from two elementary schools participated in the study.

The comparative analysis utilized quantitative statistical methods, including an attitude questionnaire and an online task. The questionnaire examined the fifth and sixth grade students' self-perception of their proficiency in computer skills and Information Literacy. The online task aimed to determine the extent to which the students actually mastered Information Literacy skills in practice. Screen-recording software captured the students' computer search paths, producing videos that enabled us to track their search processes and their information assessment methods while executing the task. This was complemented by qualitative, semi-structured interviews with the teachers, aimed at understanding how they taught these skills.

The analysis of the findings of both the students and teachers revealed that there were very few differences between the two schools, both in terms of teaching methods and student learning. In both schools, the students claimed that they had acquired most of their computer and information skills by self-learning rather than in school. They also maintained that the school curriculum placed greater emphasis on computer skills than on Information Literacy. However, although they learned less information skills in school, the students still assessed their information skills as higher than their computer skills. This claim was shown to be inaccurate, based on the results of the online task. There was no correlation between their self-perception of Information Literacy and their success in the online task.

A Structural Equation Model (SEM), based on regression analyses of the online task findings, revealed that the students' information behavior, as seen in the videos, served as a mediating variable between their self-perception and their success in the Information Literacy task.

Interviews with school management indicated that they had failed to develop guidelines to implement the Ministry of Education's policy, nor did they follow or supervise teaching methods. Interviews with the teachers revealed that most were insufficiently engaged in developing their students' Information Literacy. Some

teachers tended to pay more attention to this subject than others did, due to personal background, motivation, training, or their greater self-efficacy.

In conclusion, a number of gaps were identified, including a discrepancy between teachers' perception of the importance of imparting Information Literacy and their actual engagement in teaching it to their students, and a gap between students' perception of their proficiency in Information Literacy and their actual abilities.

The results of this study do not support the Ministry of Education's assumption that all teachers have the ability and the appropriate training to integrate Information Literacy into their teaching, and that the students ultimately master Information Literacy as required by the ICT program.

In agreement with the results of studies conducted in other countries, we believe that the Israeli educational system should develop an independent curriculum, specifically designed towards mastering Information Literacy. Professional teachers should be trained to apply the appropriate pedagogy in lessons dedicated to this field.

System No.
002492773