

**FROM INFORMATION LITERACY ASSESSMENT TO  
INFORMATION BEHAVIOUR: A CASE STUDY OF  
MALAYSIAN SECONDARY SCHOOL STUDENTS**

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**FACULTY OF COMPUTER SCIENCE AND  
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**FROM INFORMATION LITERACY ASSESSMENT TO INFORMATION  
BEHAVIOUR: A CASE STUDY OF MALAYSIAN SECONDARY SCHOOL  
STUDENTS**

Field of Study: **INFORMATION LITERACY (LIBRARY SCIENCE)**

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STUDENTS

**ABSTRACT**

This study uses a multiple method case study to investigate the complementarity between information literacy (IL) and information behaviour (IB), specifically to understand how students' information behaviour may have formed their information literacy skills. Few studies have explored the relationship between these two major sub-disciplines of library and information science. With a focus on Malaysian secondary school students, this case study is designed in two distinct phases. In Phase I, the aim was to develop a valid adapted measurement tool for information literacy skills assessment of Malaysian secondary school students. A total of 146 secondary school students aged 16 were evaluated on their information literacy skills using an adapted and validated *Tool for Real-time Assessment of Information Literacy Skills* (TRAILS-9). This phase contributes to the adaptation, translation and validation of an IL assessment tool and also to ascertain the IL skills level of the respondents in this study. Phase II was designed to understand the information behaviour of high achieving secondary school students; based on their academic achievement and IL skills level. This phase involved 17 informants for the first cycle involving investigation of IB based on academic tasks, while the second cycle involved 6 informants in investigating their IB during a leisure activity. The first cycle in this phase data was collected through interviews, document analysis and task assessment using flowcharts. Findings reveal that TRAILS can be adapted for assessing Malaysian students' IL skills level. Overall the students' IL performance level was at an average. Based on their IL score and academic achievement level, the students were categorized to four cohorts - revealing that not all high achieving students have high level of

IL skills. Some of the low academic achieving students were somewhat more competent in IL skills, specifically in using information responsibly and ethically. However, low achieving students were less competent in 'evaluating sources and information'. The examination of students' project work (to elicit evidences of IL skills) and interviews with students revealed that there are slightly differences in the information behaviour between the informants according to the groups. Using Winston's IB model and Hektor's Information Activity model, the information behaviour and information literacy of the students is depicted in a proposed complementarity IL-IB framework. This study has contributed to developing a valid and reliable systematic mechanism to adapt a pre-existing instrument to assess IL skills of secondary school students. The study also provides empirical evidence to map the relationship or complementarity of information literacy (IL) and information behaviour (IB). School authorities need to understand students' information behaviour to inculcate the development of information literacy skills in advancing their academic achievements.

Keywords: Information literacy; Information behaviour; TRAILS, IL assessment; secondary school; Malaysia.

**DARIPADA PENILAIAN LITERASI MAKLUMAT KEPADA TINGKAH LAKU  
MAKLUMAT: KAJIAN KES PELAJAR SEKOLAH MENENGAH DI MALAYSIA**

**ABSTRAK**

Kajian ini menggunakan kaedah kajian kes untuk menyiasat hubungan antara kemahiran literasi maklumat dan tingkah laku maklumat dikalangan pelajar sekolah di Malaysia. Beberapa kajian telah meneroka hubungan antara dua sub-bidang utama dalam sains perpustakaan. Kajian ini bertujuan untuk mengetahui bagaimana tingkah laku maklumat mempengaruhi skil pelajar dalam literasi maklumat. Kajian kes ini melibatkan dua fasa yang berbeza. Pada fasa pertama, melibatkan 146 pelajar sekolah menengah berusia 16 tahun, menguji kemahiran literasi maklumat mereka dengan mengguna dan menyesuaikan penilaian *Tool for Real-time Assessment of Information Literacy Skills* (TRAILS). Fasa ini menyumbang kepada penyesuaian, terjemahan dan pengesahan alat penilaian IL dan juga memastikan tahap kemahiran IL responden dalam kajian ini. Fasa kedua memberi tumpuan kepada memahami tingkah laku maklumat pelajar sekolah menengah berdasarkan pencapaian akademik mereka dan tahap kemahiran IL. Fasa ini melibatkan 17 informan untuk pusingan pertama dan 6 informan untuk pusingan kedua. Data fasa ini dikumpulkan melalui temu bual, analisis dokumen dan penilaian tugas menggunakan jadual aliran. Dapatan menunjukkan tahap prestasi pelajar IL keseluruhan adalah sederhana. Berdasarkan skor IL dan pencapaian akademik mereka, pelajar dapat dikategorikan kepada empat kumpulan, menunjukkan bahawa tidak semua pelajar yang mencapai prestasi akademik yang tinggi mempunyai kemahiran IL yang tinggi. Beberapa pelajar yang pencapaian akademik yang lebih rendah, agak kompeten untuk menggunakan maklumat secara bertanggungjawab dan beretika. Walau bagaimanapun, pelajar kurang cekap dalam 'menilai sumber dan maklumat'. Penilaian kerja projek pelajar (untuk mendapatkan bukti kemahiran IL) dan wawancara dengan pelajar menunjukkan terdapat

sedikit perbezaan dalam tingkah laku maklumat antara informan mengikut kumpulan. Menggunakan '*Winston's model*' dan '*Hektor's Information Activity*', tingkah laku maklumat dan literasi maklumat para pelajar digambarkan dalam rangka kerja yang dicadangkan supaya boleh dijadikan sebagai petunjuk untuk memahami hubungan di antara dua bidang ini. Kajian ini telah menyumbang kepada pembangunan mekanisme sistematik yang sah dan boleh dipercayai untuk menyesuaikan instrumen yang sedia ada untuk menilai kemahiran IL pelajar sekolah menengah. Kaedah ini membolehkan sumbangan yang lebih besar terhadap metodologi penilaian IL. Kajian ini juga menyediakan bukti empirikal untuk memetakan hubungan antara literasi maklumat (IL) dan tingkah laku maklumat (IB). Pihak berkuasa sekolah perlu memahami tingkah laku maklumat pelajar untuk merancang perkembangan literasi maklumat.

Kata Kunci: Literasi maklumat; Tingkahlaku maklumat; TRAILS, Penilaian IL; sekolah menengah; Malaysia.