Documentary Analysis for Identifying the Factors Influencing Information Literacy among Thai Undergraduate Students

Sumalee Bhornchareon^a, Sasipimol Prapinpongsakorn^b, Wawta Techataweewan^{c*}

a,b,c Information Studies Program, Faculty of Humanaities, Srinakharinwirot University, Bangkok, Thailand

Abstract

The purpose of this poster was to identify the influencing factors on the information literacy of Thai undergraduate students. The documentary research concerned the academic sources, libraries, and online databases. Content analysis was necessary to synthesize the factors of IL and consisted of three factors such as personal characteristics, learning environment, and self-directed learning. The personal characteristics included gender, year of study, GPA, and field of study. The learning environment included the IL course, library usage, ICT facilities, and faculty staff. The aspect of self-directed learning consisted of self-motivation, self-monitoring, and self-modification. Therefore, the IL factors framework developed the questionnaire to assess the information literacy following of undergraduate students in accordance with the standards of IFLA information literacy competencies.

Keywords: Information literacy, documentary analysis, Thai undergraduate students

1. Introduction

The term of information literacy was first used in 1974 by Paul Zurkowski, the former President of the US Information Industry Association for the National Commission for Libraries and Information Science (NCLIS) which he talked about the need for people to become information literate if they were to survive and compete in an emerging Information Society (UNESCO, 2007, p. 1). Information literacy refers to a set of abilities requiring individuals to recognize when information is needed and have the abilities to locate, evaluate, and use effectively the needed information (Association of College and Research Libraries, 2000). Information literacy is a concept that is largely discussed in the context of higher education and becoming applied in specific academic disciplines (Campbell, 2004; Williams, 2008). Nowadays, 21st-century literacies included information literacy skill. It was known how to learn and know that students needed to behave as if it were a lifelong learning skill (Trilling & Fadel, 2009). In the past, the students used the library as a primary source for their research. In the information era, the information increases enormously and spreads wildly via the Internet. Today, students first turn to Google, Internet information sources and social media instead of libraries. The Internet may be convenient for students, but that familiarity does not necessarily enhance their information literacy skills. The students must access and process information efficiently. The students need the skills essential to succeed in higher education.

2. Objective

There are many research works related to the undergraduate students' information literacy either in Thailand and aboard. Most of the works studied the evaluation of information literacy using Information Literacy Competency Standards for Higher Education for the criterion. Some research results revealed that Thai students were at a medium level of information literacy skills. This research aimed to analyze the literature involved in the factors influencing the information literacy skills of undergraduate students.

^{*} Corresponding author address: Information Studies Program, Faculty of Humanaities, Srinakharinwirot University, Bangkok, Thailand E-mail: 'mawe_bhorn@hotmail.com 'sasipimol@g.swu.ac.th 'walta@g.swu.ac.th

3. Methodology

The documentary research method was conducted to analyze the variables of the research works and to synthesize the factors effected to the students' information literacy skills. The documents came from searching through the academic sources, libraries and online databases. Content analysis was necessary to synthesize and categorized the factors of IL to three groups such as personal characteristics, learning environment, and self-directed learning.

4. Results

The factors that predicted generalized success in terms of undergraduate students as opposed to terms of success in information literacy and identified in many studies. The factors of the study could be categorized into the following three groups:

4.1 Personal Characteristics

Personal characteristics consisted of gender, year of study, GPA and field of study (Baggia et al, 2016; Bartol et al., 2017; Chaum, 2014; Chominthachak, 2016; Detlor, Julien, Serenko, & Booker, 2010; Heangrat, Sajanan, & Jermprayong, 2017; Lanning & Mallek, 2017; Mamak, 2010; Ogunlan, Oshinaike, Akinbode, & Okunoye, 2013; Petermanec, & Sebjan, 2017; Pholkla, 2007; Pranimit, 2009; Sirirat, 2011; Supan, Phoongat, & Supakwanit, 2013; Tiemmuang, 2011; Virachat, 2012; William & Evan, 2008). The characteristics of undergraduate students included their attributes as the physical, studying and functional individuals that describe and categorize differences in terms of their information literacy skills.

4.2 Learning Environments

Learning environments consisted of an IL course, library usage, ICT facilities, and faculty staff (Detlor et al., 2010; Japakiya, Khomkaew, & Maso, 2014; Jarusawat, Wongjumrat, & Kulchan, 2013; Lanning & Mallek, 2017; Mamak, 2010; Ogunlana et al., 2013; Supan, Phoongat, & Supakwanit, 2013; Tiemmuang, 2011; Virachat, 2012). The learning environments have enhanced the skills of the students by taking an IL course, mostly used as a general education course for first-year students and the support from the faculty staff as well as the library usage and Internet facilities.

4.3 Self-Directed Learning

Self-directed learning consisted of self-managing, self-monitoring, and self-modifying (Alfaifi, 2016; Bangphuphamon, 2016; Charoenchim, Khantiya, Charoenchim, & Samakkhi, 2012; El-Gilany & Abusaad, 2013; Alfaifi, 2016; Lee, Yeung, Ip, 2517; Ouchariyapitak, Chavakhanyankoon, Wisitwongsakorn, & Leelayan, 2016; Phodong, 2017; Soliman & Shailh, 2015; Sun, Xie, & Anderman, 2018; Tekkol & Demirel, 2018; Wannaprapa, 2015; Yuan, Williams, Fang, & Pang 2012). Self-management refers to the ability to identify the significance of and being inclined to approach tasks with a sense of clarity about the outcomes, a strategic plan, and necessary data, and then drawing from past experiences, anticipating success indicators, and creating alternatives for accomplishment. Self-monitoring refers to sufficient self-knowledge about what works, establishing conscious metacognitive strategies to alert the perceptions for in-the-moment indicators of whether the strategic plan worked or not, and to assist in the decision-making processes regarding alterations to the plan and choosing the right actions and strategies. Self-modification refers to the reflection, evaluation, analysis, and constructing meaning from experience and applying the learning to future activities, tasks, and challenges (Costa, & Kallick, 2004, p. 6).

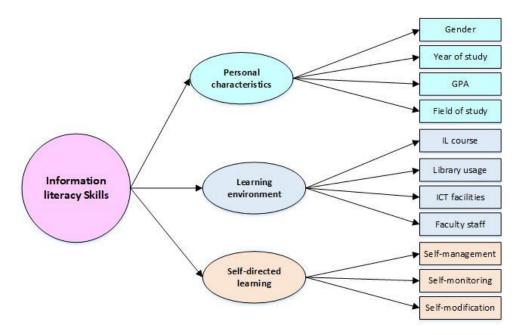


Figure 1: Framework of Information Literacy Factors for Undergraduate Students

5. Further Study

The IL factors framework was also used to develop the questionnaire to confirm the factors of the information literacy of undergraduate students following the IFLA information literacy standards, including 1) Access: The user accesses information effectively and efficiently; 2) Evaluation: The user evaluates information critically and competently; and 3) Use: The user applies or uses information accurately and creatively (Lau, 2006, pp. 16-17).

References

- Amornsiripong, W. (2518). Information literacy of undergraduate students, Nakhon Pathom Rajabhat University. *Journal of Information Science*, *36* (3), 42-66. (In Thai)
- Baggia, A., Žnidaršič, A., Borštnar, M. K., Puciar, A., Šorgo, A., Bartol, T. ... Dolničzr, D. (2016). Factors influencing the information literacy of students: Preliminary analysis. In 29th Bled eConference Digital Economy, June 19-22, 2016, Bled, Slovenia (pp. 617-631). Bled, Slovenia: Association for Information Systems.
- Bangphuphamon, K. (2016). The development of the instructional model in the classroom and the self-directed learning to promote analytical thinking ability of undergraduate students (Doctoral dissertaton). King Mongkut's University of Technology North Bangkok, Bangkok, Thailand. (In Thai)
- Bartol, T., Dolnicar, D., Podgornik, B. B., Rodic, B., & Zoranovic, T. (2017). A comparative study of information literacy skill performance of students in agricultural sciences. *Journal of Academic Librarianship*, 44(3), 374-382.
- Campbell, S. (2004). Defining information literacy in the 21st Century. In *World Library and Information Congress*, 22-27 *August* 2004, *Buenos Aires, Argentina* (pp. 1-9). Retrieved from https://archive.ifla.org/IV/ifla70/papers/059e-Campbell.pdf
- Charoenchim, S., Khantiya, T., Charoenchim, Satit, & Samakkhi, U. (2012). Self-directed learning ability of preservice teacher students in Faculty of Education and Development Sciences, Kasetsart University. Bangkok: Kasetsart University. (In Thai)
- Chaum, N. (2014). Information literacy skills of undergraduate students of Chandrakasem Rajabhat University. Bangkok: Chandrakasem Rajabhat University. (In Thai)
- Chominthachak, A. P. (2016). Information literacy behavior for undergraduate students of Dhurakij Pundit University. Bangkok: Dhurakij Pundit University. (In Thai)
- Costa, L., & Kallick, B. (2004). *Assessment strategies for self-directed learning*. Thousand Oaks, CA: Corwin Press.

- Detlor, B., Julien, H., Serenko, A., & Booker, L. (2010). *Factors affecting student learning outcomes of information literacy instruction*. Retrieved from https://www.academia.edu/14423843Factors_affecting_student_learning_outcomes_of_information_literacy_instruction
- Alfaifi, M. S. (2016). *Self-directed learning readiness among Undergraduate students at Saudi Electronic University in Saudi Arabia* (Doctoral dissertation). University of South Florida Scholar, FL.
- Heangrat, P., Sajanan, C., & Jermprayong, S. (2017, January-June). Information literacy of undergraduate students of Rajabhat University. *Journal of the Thai Library Association*, 11(1), 33-47. (In Thai)
- Japakiya, N., Khomkaew, C., & Maso, S. (2014). *The development of information literacy skills of higher education students in the three southern border provinces.* Yala: Yala Rajabhat University. (In Thai)
- Jarusawat, P., Wongjumrat, P. & Kulchan, T. (2013). *Information literacy behavior of students at Chiang Mai University*. (In Thai)
- Lanning, S., & Mallek, J. (2017). Factors influencing information literacy competency of college students. *The Journal of Academic Librarianship*, 43, 443-450.
- Lau, J. (2006). *IFLA guidelines on informational literacy for lifelong learning*. Retrieved from http://www.ifla.org/files/assets/information-literacy/publications/ifla-guidelines-en. pdf
- Lee, C. C., Yeung, P. A. S., & Ip, T. (2017, July). University English language learners' readiness to use computer technology for self-directed learning. *System*, *67*, 99-110.
- Mamak, C. (2010). Business information literacy of undergraduate students in Faculty of Business Administration of private universities in Bangkok area (Master's thesis). Srinakharinwirot University, Bangkok, Thailand. (In Thai)
- Ogunlana, E. K., Oshinaike, A. B., Akinbode, R. O., & Okunoye, O. (2013). Students' perception, attitude and experience as factors influencing learning of information literacy skills in public universities in Ogun State, Nigeria. *Information and Knowledge Management*, *3*(5), 127-134.
- Ouchariyapitak, D., Chavakhanyankoon, S., Wisitwongsakorn, P., & Leelayan, S. (2016). *Student self-learning behavior of Faculty of Home Economics Technology, Rajamangala University of Technology Phra Nakhon*. Bangkok: Rajamangala University of Technology Phra Nakhon. (In Thai)
- Petermanec, Z., & Sebjan, U. (2017). Evaluation components of information literacy in undergraduate students in Slovenia: An experimental study. *Library & information Science Research*, 39(1), 69-75
- Phodong, A. (2017). *The development of self-directed learning management model to promote the ability of learning design of teacher students of Rajabhat universities* (Doctoral dissertation). Naresuan University, Phitsanulok, Thailand. (In Thai)
- Pholkla, M. (2007). *Information literacy of first year undergraduate students at Prince of Songkla University, Pattani Campus* (Master's thesis). Prince of Songkla University, Pattani, Thailand. (In Thai)
- Pranimit, S. (2009). *Information literacy of first year undergraduate students at Srinakharinwirot University* (Master's thesis). Srinakharinwirot University, Bangkok, Thailand. (In Thai)
- Sinnoi, M., & Kathong, A. (2018, January-April). Information literacy of Ubon Ratchathani University's students. *TLA Research Journal*, 5(1), 82-92. (In Thai)
- Sirirat, S. (2011). *Information literacy of undergraduate students, Faculty of Education, Songkhla Rajabhat University* (Master's thesis). Sukhothai Thammathirat Open University, Nonthaburi, Thailand. (In Thai)
- Soliman, M., & Al-Shaikh, G. (2015). Readiness for self-directed learning among first year Saudi medical students: A descriptive study. *Pakistan Journal of Medical Sciences*, 31(4), 799-802.
- Soliman, M., & Al-Shaikh, G. (2015). Readiness for self-directed learning among first year Saudi medical students: A descriptive study. *Pakistan Journal of Medical Sciences*, 31(4), 799-802.
- Sun, Z., Xie, K., & Anderman, L. H. (2018). The role of self- regulated learning in students' success in flipped undergraduate math courses. *The Internet and Higher Education*, *36*, 41-53.
- Supan, S., Phoongat, W., & Supakwanit, N. (2013). *Information literacy of students of Rajamangala University of Technology Isan, Kalasin Campus*. Kalasin: Rajamangala University of Technology Isan. (In Thai)
- Tekkol, I. A., & Demirel, M. (2018). An Investigation of Self-Directed Learning Skills of Undergraduate Students. Frontiers in Psychlogy, 9. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/ PMC6265596
- Tiemmuang, P. (2011). Information literacy of undergraduate students at Rajamangala University of Technology Tawan-Ok, Chakrapongphuwanat Campus. Bangkok: Rajamangala University of Technology Tawan-Ok. (In Thai)
- Trilling, B. & Fadel, C. (2009). 21st Century skills: Learning for life in our times. San Francisco, CA: Jossey-Bass.

UNESCO. (2007). Understanding information literacy: A Primer. Paris: Author.

- Virachat, J. (2012). *Learning factors affecting information literacy skills of undergraduate students at Dhurakij Pundit University* (Master's thesis). Burapha University, Chonburi, Thailand. (In Thai)
- Wannaprapa, T. (2015). *Teaching styles to develop data synthesis skills by self-directed learning through social media for undergraduate students* (Doctoral dissertation). Burapha University, Chonburi, Thailand. (In Thai)
- Williams, M. H., & Evans, J. J. (2008). Factors in information literacy education. *Journal of Political Science Education*, 4(1), 116-130.
- Yuan, H. B., Williams, B. A., Fang, j. B., & Pang, D. (2012). Chinese baccalaureate nursing students' readiness for self-directed learning. *Nurse Education Today* 32, 427-431.