

Mastering the Information Literacy Skills in Enhancing Undergraduate Students' Learning Process

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Abstract. This study is to identify information literacy skills in enhancing the learning process among undergraduate students. Various kinds of information sources available these days for the students to choose in fulfilling their information needs. In searching for related and relevant information, the undergraduate students are required to have some skills to ensure that they are referring to the right source of information. Information literacy skills are very much needed to be obtained by the searchers in enhancing their learning process. The deliverance of information literacy instruction to students is becoming progressively more significant due to the proliferation of electronic resources and the increased usage of the net as an information source. Information literacy is a set of abilities requiring individuals to recognize when information is needed and have the ability to locate, evaluate, and use the required information effectively. Information literacy has also become more and more significant in the contemporary environment of rapid technological change and proliferating information resources. Because of the escalating complexity of this environment, individuals are faced with diverse, abundant information choices: in their academic studies; in the workplace, and in their personal lives. Information is available throughout the libraries, community resources, special interest organizations, media, and the internet. The objectives of this research are first, to identify the characteristics of information literacy skills in enhancing the learning process among undergraduate students and to examine the relationship between information literacy skills and learning process among undergraduate students. The study involves a descriptive survey research design. A quantitative approach was employed in both data collection and data analysis. The study population is made up of undergraduate students of the Universiti Teknologi MARA (UiTM) Selangor.

Keywords: Library and Information Management, Information literacy, information literacy skills, learning process, undergraduate students

1 Introduction

This study is to identify information literacy skills among undergraduate students, as it is one of the important elements in the learning process. Information literacy skills are one of the crucial factors to all students across the world. Swann (1985 & 1987) identifies that those who uncertain about their skills have a tendency to pursue information that is dependable with their views of themselves and interpret uncertain information in a manner that consistent with these views. Baro (2011) highlights that information is presented in unfiltered formats, raising questions about its authenticity, validity, and reliability. Doyle (1994) defines information literacy skills as a set of abilities required to access, evaluate, and use information from a variety of sources.

Flywel & Jorosi (2018) mention that students are encountered with various and plentiful information selections in their academic studies. Therefore, information literacy skills among students are vital to ensure that they are able to filter the information retrieved before deciding whether to use or not to use it. Besides seeking for information from the printed sources that available in the libraries and information centres, students are also able to get their information needs from the non-printed sources like online databases, electronic journals, e-books and many other sources available these days (Zaiton, Norhayati, Hasnah & Nurul Syfa, 2020). Bawden (2001) views information literacy skills as related to “computer literacy, internet literacy, digital literacy and media literacy”. In the 21st century, students live in technology, and media-suffused situation and they are obligatory to seek plenty of information and integrate information sharing with the whole world (Partnership for 21st Century Skills, 2009).

Tang and Tseng (2013) highlight that, to ensure the students are able to succeed in the online learning environment, they must obtain critical thinking and decision-making skills, as well as the capability in evaluating information - to find out which information is correct and truthful. They added that online trainers create courses to involve students in self-regulated learning and to nurture students' skill to confirm their own learning progress. Before that, Zhang, Li, Duan and Wu (2001) in their study discover that distance learning self-efficacy, self-regulated learning skills, and information literacy skills are significant analysts of learners' general achievements in distance learning. According to Kurbanoglu, Akkoyunlu and Umay (2006), students will readily commence and effortlessly resolve their information searching complications if they are poised about their information literacy skills.

On the other hand, Oware (2010) says, information literacy skills have developed around the world as necessary skills for the 21st century. Baro and Keboh (2012) believe that this is caused by the swift progression in information and communication technologies globally. At the same time, Flywel & Jorosi (2018) mention that the active use of information by students has become essential. As informed by Lau (2006), information has turned out to be a factor that allows students at all levels to attain better results in their academic responsibility and even at work after graduation. He added that contemporary information overload entails the students to authenticate and evaluate information to prove its reliability. Ojedokun (2007) mentions, when students own suitable information literacy skills, their self-assurance and capability to

work individually is enriched since they can critically think, understand the information well and make conversant decisions. Wema (2006) and Chu, Yeung & Chu (2012) say, it is vital for universities to certify that all students attain information literacy skills by participating in information literacy education into their curriculum.

2 Literature Review

Information Literacy Skills

A few definitions of information literacy are shared in the literature. American Library Association [ALA] (2000) defines information literacy skills as a set of abilities to recognize when information is needed and have the ability to locate, evaluate, and use the needed information effectively. While, Chartered Institute of Library and Information Professionals (CILIP, 2012) mentions that information literacy skills are abilities of deliberate when and why you need information, where to find it, and how to evaluate, use and communicate it in an ethical manner.

Prasanna (2008) informs that information literacy skills is important to the attainment in education, occupation and daily communication. It will advantage in evolving student-centred, inquiry-based, problem solving, critical thinking and encourage a proactive learning environment. Lifelong learning is very vital in the 21st century. In contrast, students need to be cultivated with the capabilities and skills of how to learn, or learning to learn, by developing the aspects of reasoning and critical thinking. Information literacy skills will support students to achieve this target in a broader sense, in student centered learning. For that, educators and librarians need to train the students on the information literacy skills aspects. She added, the curriculum can be executed by the library professionals with the assistance of academic and administrative staff.

Lifelong Learning

Tamilchelvi & Senthilnathan (2013) says that lifelong learning is the establishment or practice of both formal and informal knowledge changes throughout people's lives to nurture the constant growth and upgrading of the knowledge and skills needed for employment and personal contentment. Information literacy formulates the foundation for lifelong learning. It is mutual to all courses, to all learning backgrounds, and to all levels of education. They added that lifelong learning allows students to understand information and expend their surveys, become more self-directed, and undertake better control over their own learning. According to Tamilchelvi & Senthilnathan, an information literate individual is capable of:

- Determine the extent of information needed
- Access the required information effectively and efficiently
- Evaluate the information and its sources critically
- Incorporate selected information into one's knowledge base
- Use information effectively to accomplish a specific purpose

- Understand the economic, legal, and social issues surrounding the use of information, and access and use information ethically and legally

3 Methodology

This study involves a descriptive survey research design. A quantitative approach was applied in both data collection and data analysis. The study population is made up of undergraduate students of the Universiti Teknologi MARA (UiTM) Selangor. All undergraduate students from the twenty-six (26) faculties and academic centres were included in this study. The five Likert scales ranging from “strongly disagree” through “don’t know” to “strongly agree” were used to measure the items.

4 Results and Discussions

Table 1. Information Literacy Skill

	N	Minimum	Maximum	Mean	Std. Deviation
1. You understand the meaning of information literacy skills.	165	2	5	3.79	.649
2. Information literacy skills are important to you.	165	3	5	4.18	.656
3. Information literacy skills should be obtained by all undergraduate students to enhance their learning process.	165	3	5	4.22	.647
4. You know any information literacy skills in searching for information.	165	2	5	3.84	.692
5. You know about how to seek for information by yourself.	165	2	5	3.98	.662
6. Information literacy skill is important to you in managing your information searching.	165	3	5	4.14	.680
7. Having information literacy skills could help you in doing your daily tasks, e.g., Your learning process.	165	3	5	4.19	.630

8. Your information literacy skills could solve your information-seeking problem quickly in your learning process.	165	3	5	4.13	.677
9. Your information literacy skills could help you in formulating questions based on your information needs in your learning process.	165	3	5	4.04	.643
10. Your information literacy skills could help you in identifying potential sources of information in your learning process.	165	3	5	4.02	.639
11. Your information literacy skills could help you in developing your successful search strategies in your learning process.	165	3	5	4.06	.622
12. Your information literacy skills could help you in accessing various sources of information in your learning process.	165	3	5	4.07	.655
13. Your information literacy skills could help you in evaluating information sources you found in your learning process.	165	3	5	4.05	.656
14. Your information literacy skills could help you in organizing information for practical applications in your learning process.	165	3	5	4.09	.688
15. Your information literacy skills could help you in integrating new information from sources into an existing body of knowledge.	165	3	5	4.08	.666
16. Your information literacy skills could help you in using information sources in your critical thinking.	165	3	5	4.08	.629

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17. Your information literacy skills could help you in using information sources in your problem-solving.	165	3	5	4.07	.700
18. Your information literacy skills could enhance your learning process.	165	3	5	4.13	.667
19. Your information literacy skills could help you to understand more in your learning process.	165	3	5	4.12	.670
20. Your information literacy skills could help you in becoming more efficient in your learning process.	165	3	5	4.08	.662
21. Your information literacy skills could help you in becoming more advance in your learning process.	165	3	5	4.10	.686
22. Your information literacy skills could help you in improving your grades in your studies.	165	2	5	4.11	.672
Valid N (listwise)	165				

This study is conducted to identify the characteristics of information literacy skills in enhancing the learning process among undergraduate students. The data analysis described the mean scores in identifying each construct of information literacy skills characteristics in enhancing undergraduate students learning process. The findings found that many students understand the meaning of information literacy skills with the (mean = 3.79, S. D. = .649) based on the score obtained. Majority of the students highlighted that information literacy skills are important to them (mean = 4.18, S. D. = .656). Besides that, all the respondents responded that information literacy skills should be obtained by all undergraduate students to enhance their learning process with the (mean = 4.22, S. D. = .647). In other words, most of the undergraduate students agreed that information literacy skills are very useful in enhancing their learning process.

On the other hand, undergraduate students know the kinds of information literacy skills in searching for the information they need. The ILS for this statement is (mean = 3.84, S. D. = .692). While for undergraduate students knowledge about how to seek for the information themselves, the result is (mean = 3.98, S. D. = .662). This showed that not all undergraduate students have enough knowledge of information literacy skills. Besides that, the majority of undergraduate students agreed that information

literacy skill is important to them in managing their information searching. The findings were (mean = 4.14, S. D. = .680).

It is found that having information literacy skills could help undergraduate students in doing their daily tasks, e.g., their learning process. The finding shows the information literacy skills for this question with (mean = 4.19, S. D. = .630). Majority respondents agreed that undergraduate students' information literacy skills could solve their information-seeking problem easily in their learning process. The findings for this statement is (mean = 4.13, S. D. = .677). While (mean = 4.04, S. D. = .643) findings were found for undergraduate information literacy skills could help them in formulating questions based on their information needs in their learning process questions.

Besides that, the findings for the question related to the information literacy skills could help the undergraduate students in identifying potential sources of information in their learning process has found the (mean = 4.02, S. D. = .639). While the other question on information literacy skills could help undergraduate students in developing their successful search strategies in their learning process, found the result of (mean = 4.06, S. D. = .622). The findings of (mean = 4.07, S. D. = .655) is for the question on information literacy skills could help the undergraduate students in developing their successful search strategies in their learning process.

The table above also shows that undergraduate students' information literacy skills could help them in evaluating information sources they found in their learning process. The findings were (mean = 4.05, S. D. = .656). It is also shown that undergraduate students' information literacy skills could help them in organizing information for practical applications in their learning process with the (mean = 4.09, S. D. = .688). While, for the question related to the undergraduate students' information literacy skills could help them in integrating new information from sources into an existing body of knowledge with the findings of (mean = 4.08, S. D. = .666).

Regarding the undergraduate students, information literacy skills could help them in using information sources in their critical thinking with the results of (mean = 4.08, S. D. = .629). On the other hand, respondents responded that their information literacy skills could help them in using information sources in their problem solving with the findings of (mean = 4.07, S. D. = .700). While they also agreed that their information literacy skills could enhance their learning process with the (mean = 4.13, S. D. = .667).

Based on the above table, the undergraduate students' information literacy skills could help them to understand more in their learning process with the (mean = 4.12, S. D. = .670). It is found that the undergraduate students' information literacy skills could help them in becoming more efficient in their learning process. It is also discovered that the undergraduate students' information literacy skills could help them in becoming more advance in their learning process with (mean = 4.10, S. D. = .686). While for their information, literacy skills could help them in improving their grades in their studies shows (mean = 4.11, S. D. = .672).

5 Conclusion

Information literacy has also become more and more significant in the contemporary environment of rapid technological change and proliferating information resources. Because of the escalating complexity of this environment, individuals are faced with diverse, abundant information choices: in their academic studies: in the workplace, and in their personal lives (Anafo and Filson, 2014). In addition, information is available through multiple media, including graphical, aural, and textual, and these pose new challenges for individuals in evaluating and seeing it. The uncertain quality and expanding quantity of information pose large challenges for society (Ashoor, 2005). Hence, it is really crucial for the undergraduate students bear at least good information literacy in enhancing their learning process throughout their fields at the universities.

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