Humanizing Students’ Information Literacy Development

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Abstract

Students’ ability to search, analyse, synthesise and use information often associated with students’ cognitive ability. Such a perspective has limited the knowledge on affective domain of students’ information literacy development. The study examined the interplay of affective domain in students’ information literacy development in higher learning. The study employed a qualitative research design and involved 31 lecturers, librarians and students in a public research university. Data was collected using semi-structured interviews and analysed using qualitative data analysis approach. The study found that respect, appreciation and trust among lecturers, librarians, students, experts, and practitioners have led to collective and organised efforts of students’ information literacy development at classroom, department and university levels. The study also found that personal passion, irritation, self-esteem, patience, boredom, frustration, difficulty, and preference have somewhat influenced lecturers’, librarians’, and students’ participation and non-participation in students’ information literacy development. The study further implicated that the integration of affective domain in the planning and implementation of the learning process, outcomes and assessment of students’ information literacy development is a way forward to humanise and thus sustain the development and application of information literacy in higher learning.

Keywords: Information Literacy; Affective Domain; Higher Learning; Malaysia

Introduction

The Information literacy standards for higher learning developed by the Australian and New Zealand Institute for Information Literacy (Bundy, 2004), Association of College and Research Libraries (2000), and Society of College National and University Libraries (1999) defined information literacy as a set of abilities that enables students to identify specific information needs or goals; search, evaluate, organise, analyse and synthesise information and its sources; use the information to serve information needs or goals, and communicate and validate the information needs and goals and process. Recently, Information Literacy Group (2018) included the ability of individuals to search and use information confidently and ethically in information literacy definition. Such extension of information literacy definition is much needed in the changing landscape of higher learning that requires students to confidently and ethically search, evaluate, organise and synthesised information and its sources independently of their lecturers. In the context of Malaysian higher learning, information literacy programs have been introduced in Malaysian universities to assist the transformation of university graduates into knowledge workers who have the abilities to acquire, apply, synthesise and create knowledge (Chan, 2003; Edzan & Mohd Saad, 2005; Mohd Saad & Awang Ngah, 2002). Later, the introduction of the Malaysian Qualification Framework (Malaysian Qualifications Agency, 2007) reinforced information literacy programs in Malaysian universities as a means to develop information problem-solving skills among university graduates. Recently, the development
information literacy programs in Malaysian universities as a way to facilitate the
development of university graduates with
inquisitive and innovative minds and have the
abilities to apply and generate knowledge to
solve problems. Following the education
framework and policy, students’ development of
information literacy is essential to ensure active
students’ participation in higher learning and
successful attainment of higher learning
outcomes. Consequently, students’ information
literacy development in higher learning which
was originally situated in an academic library
has been shifted toward classroom learning;
indicating a need for a joint effort between
lecturers and librarians to help students acquire
information literacy.

Previous information literacy studies focused on
the perception of information literacy (e.g.,
Stebbing et. al, 2019), and various ways to help
students develop information literacy such as by
using flipped classroom (e.g., Hare & Choi,
2019), innovative teaching and learning
techniques (e.g., Appleton, Grandal Montero &
Jones, 2017; Whitver & Lo, 2017; Jarosz &
Kutay, 2017) and authentic assessment methods
(e.g., Tolland, Mogg & Bennett, 2019; Eastman
et. al, 2018; Gammons & Inge, 2017). Similarly,
studies in Malaysia investigated various factors
that could help students acquire and apply
information literacy skills such as learning
approaches (e.g., Karim et. al, 2010; Nor Fariza
& Yaacob, 2009) and orientations (e.g., Karim et
al., 2015), and personal skills (e.g., Karim et. al.,
2018) and proficiency (e.g., Karim et. al., 2014;
Judi, 2011).

While these studies could help students to
acquire the cognitive dimension of information
literacy, more studies are needed to understand
the affective dimension of information literacy
that enables students to confidently and ethically
apply information literacy in searching,
evaluating, organising and synthesising
information and its sources. With the shift of
students’ information literacy development
toward classroom learning, this study aimed to
examine the affective dimension of students’
information literacy development as experienced
by lecturers, librarians and students as they
engaged in the development process. Understanding
the interplay of affective
dimension in students’ information literacy
development would provide a comprehensive
view of information literacy development. Such
a view would be useful to develop the necessary
tools and approaches to assist and sustain
students’ information literacy development in
higher learning.

Information Literacy Development in Higher
Learning

Kilic-Cakmak (2010) showed that an increase in
students’ personal belief would lead to an
improvement in students’ ability to develop
searching strategies, access to information and
communicate information self-efficacy. Brown
(2005) also found a correlation between
students’ academic self-concept and information
literacy. It is expected that students with a
positive attitude toward learning are more likely
to engage in a knowledge-construction process
that requires them to search, evaluate, organise
and synthesize information and its sources.
Similarly, Jamali (2008) found students’
personal preferences influence information
sources used in the students’ learning process.
Jamali (2008) explained the relationship could
be explained using Zipf’s ‘least effort theory’
that posits animals, people, and even
well-designed machines will naturally choose
the path of least resistance or effort to
accomplish their goals. Following the theory,
students prefer to use information sources that
are easy to access.

Lastly, Julien and Boon (2004) also explained
the nature of information-related activities, time
constraints, motivation, the physical location
of students and information sources, and the
purpose of satisfying the information needs
would influence students’ preferences for
information search and use. For example, Julien
and Boon (2004) discovered that when the
information task is of a personal nature,
individuals use more sources of information;
with most sources are available onsite;
indicating a higher use of familiar sources in
comparison to other sources available in the
field.

Personal perspective and interest also influenced
collaboration efforts between lecturers and
librarians as they engaged in students’
development of information literacy (Rader,
199). For example, some lecturers perceive that
internet and other online information sources

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would replace libraries, and therefore assume that students can develop information literacy independent of librarians (Wright & McGurk, 2000). These lecturers underrate the benefits of information literacy programs run by the university library and further omit the programs from their classroom. On the other hand, even though some information literacy programs were successfully integrated within classroom learning, Curzon (2004) and Wright and McGurk (2000) cautioned that the implementation and assessment of the programs are still dependent on lecturers’ knowledge, skills, and interest in information literacy.

Accordingly, Wright and McGurk (2000) recommended that librarians provide guidelines on the integration of information literacy across classroom learning for lecturers who are new to information literacy. Simultaneously, Rader (1998, p. 219) claimed that librarians need to “be flexible and diversified in order to communicate successfully with faculty and students; develop good and diverse teaching skills; prepare appropriate teaching materials and guides for students; evaluate the results of their instructions; [and] integrate library instruction programs into the curriculum” (p. 219). In some cases, Julien and Boon (2002) found that academic librarians are not proactive enough in highlighting their expertise and building relationships and trust on campus because they felt self-conscious about their status as non-teaching staff. Particularly in power distance countries where hierarchical power relations are generally accepted, the different status of teaching and non-teaching staff is cited as one of the factors that slow down teacher-librarian collaboration necessary for students’ development of information literacy (Badger & Roberts, 2005).

Methodology

This study employed a qualitative research approach characterised by real and information-rich cases, and flexible and emergent in nature (Bogdan & Biklen, 2007; Merriam, 2009). This study was conducted in a Malaysian public university that offered information literacy programs for students and allowed entry for data collection process. The study aimed to investigate the affective dimension of students’ development of information literacy as experienced by lecturers, librarians and students as they engaged in students’ information literacy development.

Following the purpose of the study, information literacy programs for students based on collaboration efforts between lecturers and librarians were identified as unit analysis of the study. Working closely with a few librarians in the university’s academic library, the study identified five information literacy programs for students that were the result of collaborative efforts between lecturers and students and run by the university academic library. For the purpose of maximum variation of participants, the selected programs comprised of information literacy programs for undergraduate and post-graduate students from pure and social science disciplines.

Five lecturers, four librarians and 22 students involved in the information literacy programs were selected as participants of the study. While lecturer and student participants varied in gender, all librarians involved in the study were female, and one of them involved in two of the selected information literacy programs. Table 1, Table 2 and Table 3 illustrated profile of the participants involved in the study. For the purpose of research ethics, the study used pseudonyms to protect the participants’ privacy.

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The study employed interviews as the data collection method because they helped the study to explore the affective domain of students’ information literacy development experienced by research participants. Specifically, the study conducted five individual semi-structured interviews with the five lecturers; four individual and one paired semi-structured interviews with four librarians; and eleven individual, four paired and one trio semi-structured interviews with 22 students involved in the five selected information literacy programs. The duration of
the interviews ranged from one to two hours and conducted at a specific location and time requested by the interviewees. All interviews were transcribed and later checked by participants before they were analysed by the study.

Data from the interviews were analysed using Merriam’s (2009) steps of analysing qualitative data that used research objectives to guide the data analysis process. The study also employed Nvivo computer program for easy storage and retrieval of the data and the developed themes. Guided by the research objective of the study, the researchers read each interview transcript and identified references or excerpts within the transcript that were relevant to the research objective, i.e. the affective dimension of students’ information literacy development. This approach is also known as “broad-brush or bucket coding” (Bazeley, 2007, p. 67), which allows the researcher to read, identify, reflect on, select and chunk references within transcripts into general topic areas that reflect the research objectives or questions. The researchers used this approach because they preferred to work as a “lumper” (Bazeley, 2007, p. 67) or those who work with big pictures first before going into the details. Following the research objective, the researchers parked the identified references or excerpts into two broad categories of positive and negative emotions experienced by participants while engaging in students’ information literacy development.

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Reading the references within each broad category, the researchers openly coded each reference into its descriptive category(s) and parked them under their descriptive category(s). Open coding is “a way of classifying and then tagging text with codes, or of indexing it, in order to facilitate later retrieval” (Bazeley, 2007, p. 66). According to Merriam (2009), this is the first stage of developing themes before establishing analytical or axial coding for the references. Later the researchers developed analytical or axial codes by comparing and contrasting the descriptive codes and later grouped the descriptive codes with common attributes under parent categories (parent nodes) or under sub-categories (child nodes) of the parent categories. While the descriptive codes categorise the references independently from each other, Merriam (2009) stated the analytical codes sort the references into a meaningful “classification system” (p. 180) that suggests patterns and regularities for the phenomenon under study. Using facilities in the Nvivo program, the researchers compared and contrasted the emerging analytical codes or nodes across the perspectives of lecturers, librarians and students to come out with patterns and regularities. Lastly, the researchers cross-checked the emerging patterns with data that they had gained from interviews by reading whole interview transcripts and comparing them with the pattern that had emerged in the analytical codes across perspectives of lecturers, librarians, and students.

**Results**

Findings of the study indicated that affective domain of those involved in students’ information literacy development has coloured and to some extent, influenced the development process. Among affective domain emerged in the study are respect, appreciation and trust; passion; personal self-esteem; irritation and endurance; and boredom, frustration and difficulty. As discussed below the affective domain have influence lecturers’, librarians’ and students’ participants and non-participation in students’ information literacy development in higher learning.

**Respect, Appreciation and Trust**

Data analysis showed that respect for each other’s expertise has reinforced the planning, implementation and continuation of students’ information literacy development. After working together for more than three years, lecturers (Onn and Sam) experienced a deep sense of respect and appreciation towards librarians in their university library. The lecturers said that librarians’ knowledge, skills, experience and
commitment in developing and implementing structured information literacy programs for students are priceless. The lecturers also appreciated the librarians’ efforts in spending countless hours, exposing hundreds of their students on how to search and retrieve various information sources available in the university library and online. Following the respect and appreciation, the lecturers trusted the librarians to handle the content and approach of information literacy programs for their students.

However, librarians (Mia and Azi) had a different experience with students. The librarians observed that students’ respect and appreciation for librarians’ expertise and commitment often occurred at a later stage, usually after the librarians had managed to access and retrieve certain information sources required by the students. Nevertheless, Mia and Azi viewed the students’ appreciation as “an instant reward” for their contribution to develop information literate students in their university. The reward further motivated them to work harder in planning and implementing information literacy programs for students. A final year post-graduate student (Wina) supported the librarians’ perception. Retrospectively, she regretted that she did not consult librarians earlier in her study. She confessed that she had made a big mistake by thinking that she knew everything about the library collection and ways to search and retrieve information from the collection, and thus did not acknowledge the librarians’ expertise. Accordingly, the librarians viewed that the level of students’ confidence and expectation towards them will increase when they asserting their expertise, academic qualifications, and experience during their meeting with students. The librarians also acknowledged that students have higher respect and trust toward lecturers in comparison to librarians. Hence, the librarians highlighted the role of lecturers as a bridge or link to student–librarian partnership that would help the development of information literacy among students.

Passion

Data analysis also indicated that being passionate educators, lecturers had pushed all the way to develop information literacy among students. For example, lecturers took some of their time to collaborate with librarians to conduct information literacy programs for their students, and designed classroom learning that requires students to apply information literacy. The lecturers also went ‘the extra mile’ to train students to communicate their understanding in classroom learning. For example, a lecturer (Onn) found that some students were unwilling to contribute and share ideas during classroom learning. Accordingly, Onn posed many questions for students to answer during his lectures and tutorials, and refused to provide answers for past-year examination questions. Onn also used a ‘psychological’ persuasion to engage students in his classroom learning. Similarly, another lecturer (Wani), spent a lot of her time to train students to use information critically and help the students to develop and articulate their understanding.

The findings further showed that some students develop and apply information literacy because they are passionate about their learning. A first-year post-graduate student (Joe), reported that he was enthusiastic about developing his own understanding instead of just waiting and listening to lectures. The process of searching, reading and using information from multiple sources gave him a sense of freedom and satisfaction in constructing, articulating and reflecting his own understanding. Similarly, post-graduate students (Naim and Nori) went through all the necessary steps of searching, retrieving, reading, analysing and synthesising information from multiple sources because they were passionate to master their learning topics.

Personal Self-Esteem

The study showed that personal self-esteem was among factors that contribute toward students’ development and application of information literacy. Post-graduate students (Nori and Wina) prepared well prior to their classroom learning by independently searching, retrieving, reading, analysing and synthesising information from multiple sources to enable them to construct, present and defend their understanding during classroom learning. Nori and Wina made such efforts in order to prevent a personal embarrassment during classroom learning. Similarly, Onn, a lecture, said that students’ personal self-esteem would ultimately push them to share their understanding during classroom learning, although they initially reluctant to do so as he summarised below:
I observed that not all students like to interact during my lectures. If you kept asking those students too often, they will feel embarrassed. So I just let them keep quiet during my lectures. But during my tutorials, the number of students is smaller. So I ask a lot of questions during my tutorials. Students who do not like to be interactive just kept quiet... However, at the end of the tutorial, these students volunteered to answer my questions. They felt embarrassed because they were the only ones who had not answered my questions, so at the end, they volunteered to answer my questions.

Interestingly, personal self-esteem could hamper students’ participation in information literacy development. For instance, in order to “maintain her self-esteem”, a young and inexperienced post-graduate student (Wina) chose not to discuss her understanding with her lecturers. She preferred to independently search and use information from multiple sources and consult practitioners to reflect her understanding. Wina said she made such efforts because she did not want to be known as “those students who asked too many questions!” Being a young and experienced student, Wina said that she always being looked down by her more experienced peers. Likewise, a lecturer (Onn) observed that some lecturers would harshly scold students in front of the class. By doing so, the lecturers damaged the students’ personal egos, which would lead to the students’ disengagement from classroom learning. Similarly, Wina also reported that two of her male classroom peers dropped one of their papers because their classroom teacher harshly and openly criticised their work in front of the class. When asked why, one of the students told her that he was not comfortable with the approach, and thus decided to re-enrol in the subject in the following semester after he had “cooled down”.

Irritation and Patience

The study also demonstrated that both irritation and patience are two feelings that were closely related to student information literacy development. A lecturer (Wani) remembered feeling very irritated toward one of her students when she noticed that he had missed her lectures on strategies of preparing and presenting a research proposal. The feeling increased when the student later presented his research proposal badly. As a result, she scolded the student immediately after his presentation in front of the class for not coming to her lectures and ignoring tips that she had discussed during the lectures. Later Wani found out that this event had served as a warning for other students to reflect and refine their presentation accordingly.

Librarians (Azi and Mia) also felt irritated by the attitudes of some post-graduate students who undermined librarians’ expertise and skills in searching and retrieving information. Unlike lecturers, the librarians were patience with these students. Both of them concerned that by expressing their true feelings to students, they would widen a librarian-student gap. Azi believed that by being patience, librarians could handle students who came from different backgrounds and had different information needs. All librarian participants agreed that although not all students appreciate their effort at the beginning, most of them changed their attitudes after the librarians managed to solve their information problems.

Boredom, Frustration, and Difficulty

The study also found that students experienced feelings of boredom, frustration, and hardship during their information literacy development. Second-year undergraduate students (Amy, Kay and Kam) and final year undergraduate students (Cheng and Razak) confessed that they felt bored and lost during information literacy program run by the university library. Accordingly, the students (Cheng and Razak) believed that it was their consultation and discussion with librarians and peers that had helped them the most to acquire and apply information skills necessary to complete their information literacy assignment. Similarly, the study found that some students (Amy, Kay and, Kam) failed to employ information tools and strategies exposed to them during their information literacy program; indicated by a heavy use of personal blogs in their classroom assignments. Unlike Cheng and Razak; Amy, Kay and, Kam enrolled in information literacy program that does not prescribe information literacy assignment and thus does not require them to consult librarians to complete the assignment.

Some students also spoke of their frustration while applying information literacy during their independent learning. A final year post-graduate student (Wina), was frustrated when her supervisor assigned her a new research topic after she had spent a lot of time finding her own
research topic. However, Wina said that she did not discuss the problem with her supervisor because she did not want to make a big fuss about it. Secondly, she felt frustrated because her department did not make any effort to introduce any information literacy program early in her study. Asked why she did not approach the university librarians on her own, Wani said she just realised that she had overestimated her knowledge on information search and retrieval and only realised her mistake when she attended an information literacy program arranged by a lecturer in one of her elective courses during her final year.

Finally, students had trouble in applying information literacy. For example, final year undergraduate students (Feza and Fazil) faced a difficulty in preparing their literature review. They associated the difficulty with the process of “extracting” relevant information from different journal articles, and later “weaving” or articulating the extracted information into a coherent and systematic understanding. However, with a guidance from a librarian (Aziz), they slowly learned the ways to use and integrate multiple, isolated and contrary information from multiple sources related to their learning topic into a personal and systematic understanding of their own. Likewise, a postgraduate student (Wina) also indicated that she had to spend a lot of time to search and read journal articles before she was able to write her own review of the literature.

**Personal Preferences**

This study also demonstrated that personal preferences also influenced how students apply information literacy. A lecturer (Nora) believed that online databases subscribed to by the university provided recent and scholarly information for postgraduate students. Accordingly, Nora required her students to use these sources for their classroom assignments. Nora further enrolled her students in an information literacy program that exposed the students on how to search and retrieve information from online databases subscribed by the university library.

Final undergraduate students (Cheng and Razak) agreed with Nora’s view. The students used textbooks and information on the internet for their classroom assignments during their first and second years as required by their lecturers. Later, during their second year of study they were instructed by their lecturers to use articles from online scholarly journals in their classroom assignments. Cheng and Razak’s added that they preferred to use online information sources because these sources offered recent and most up to date information about their topic of learning. Additionally, these sources were also easily accessible from their homes and residential colleges. Other postgraduate students (Joe, Naim and Nori) equally shared this view. However, Naim and Nori cautioned that online information sources might be insufficient to help students to construct, articulate and reflect their understanding. Accordingly, in addition to online information sources, the students also used printed, original and well-known sources in their knowledge discipline. The students also said that they could get printed material easily from the university library and thus did not need to spend their time searching for information on the internet.

**Discussion**

The study found that mutual respect, appreciation and trust could lead to organised efforts by multiple players of information literacy development in higher learning, which include lecturers, librarians, students, experts, practitioners and others. Moreover, being passionate in developing and applying information literacy in higher learning had pushed the players to further commit in information literacy development despite various challenges faced by them. This study also showed that personal self-esteem, irritation, patience, boredom, frustration, difficulty, and personal preferences of the players coloured students’ participation and non-participation in information literacy development. The findings supported Matteson (2014) that argued information literacy development must consider students’ cognitive, emotional, and social development, a position shared also by Khulthau (1991) and Gatten (2004). This study also suggested that information literacy development in higher learning must consider cognitive, emotional and social aspects of all players involved in information literacy development. Such findings were similar to Rader (1998), Julien and Boon (2002) that stated any information literacy programs in higher learning require librarians and lecturers to be flexible, confident and committed to the development efforts.

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This study further suggested that learning theory developed by Illeris (2002) could explain information literacy development in higher learning. Using the theory, the development of information literacy could occur in two integrated phases of interaction and internalisation that involve cognitive, emotional and social elements. During the interaction phase, students interact with the material, players, and environment of information literacy through their perception, transmission, experience, imitation, activity, or participation in information literacy. Later, during the internalisation phase, students internalise and integrate the acquired information literacy knowledge and skills with emotional dimension through accumulation (establishing new learning, i.e. establishing new ways of searching, analysing and synthesising information), assimilation (adding new ideas to existing structures; i.e. developing new understanding) or accommodation (reconstructing or transforming existing structures; articulating new understanding in cognitive mediating artefacts). Accordingly, focusing only on the cognitive domain is insufficient to support information literacy development and application in higher education. Following Illeris (2002), there is a need to engage students’ affective domain in the internalisation phase of students’ information literacy development and application in higher learning. Such internalisation must be able to be translated into the development and assessment of any information literacy learning established at the classroom, library, department and university levels.

Conclusion

This study aims to identify the interplay of affective domain in students’ information literacy development in higher learning. The study found that respect, appreciation and trust among multiple players of students’ information literacy development have led to structured and organised efforts at the classroom and department levels. The study also found that passion, ego, irritation, patience, boredom, frustration, difficulty, and personal preferences influenced lecturers’, librarians’, and students’ participation and non-participation in students’ information literacy development. The study also suggested that students’ information literacy development in higher learning could occur in two integrated phases of interaction and internalisation that involve cognitive, emotional and social elements. Following the research findings, future studies should be focused on ways to internalise affective domain in the development and assessment of information literacy learning objectives established at the classroom, library, department, and university levels.

Acknowledgements

This work was supported by UKM grant GG-2019-067

References


