**University students’ view of self-directed learning in an online learning context**

**Abstract**

Many studies have been carried out to enhance our understanding of self-directed learning (SDL). Although there is no shortage of research on SDL among adults and university students, there have been limited efforts towards investigating SDL within an online learning context, particularly from students’ perspectives. The purpose of this research was to explore self-directed learning (SDL) in the context of online learning from university students’ point of view. A constructivist grounded theory approach was used to inform the methodology and analytical framework of this study. Thirty postgraduate students were interviewed to obtain their views and experiences of being supervised for their research project in an online learning context. Students’ views and experiences are explored in terms of their readiness for SDL and the process of SDL experienced by them. The findings suggest that students SDL skills was closely related to their ability in using technology, access to technology and time spent using technology. Furthermore, a large majority of the students’ view SDL as a flexible way of learning in which the students act as the key agent of determining his or her own learning needs, strategies and pace. This study concludes by recommending that future research (i) explores the factors promoting and inhibiting SDL in an online context of SDL and (ii) investigates the essential online learning support needed to enhance students’ SDL abilities.

**Keywords:** self-directed learning, online learning, readiness for self-directed learning, process of self-directed learning

**Introduction**

The rapid progression in internet information and communication technologies have a significant impact in transforming the teaching and learning environments of higher education. Advances in information technology are widely seen as a promising ways to facilitate the teaching and learning process, and to complement face-to-face instruction as well as interaction. According to Hicks, Reid, and George (2001), there are demands for universities to “provide for a larger and more diverse cross-section of the population, to cater for emerging patterns of educational involvement which facilitate lifelong learning and to include technology-based practices in the curriculum” (p.143). Therefore, online teaching and learning platform give flexibility to the teacher and student to co-create the learning process at anytime and anywhere without being time, place or situation bound. Furthermore, online learning environments also provides a variety of educational opportunities such as empowering students as active learner, promoting interactive and dialogical communication among students, and creating a healthy, safe and supportive learning community.

A point to note, teaching and learning at higher education institution differ significantly from spoon fed approaches being practices in most Malaysian school. Universities’ teaching and learning focuses on the student centered learning method which requires student to be self-independent and self-directed learner, in other words students are required to direct his or her own learning (Hartley & Bendixen, 2001) with little supervision or interference from the lecturers. Hence, it is mandatory for university students to be able to take charged and plan their learning to be successful in the university. According to Candy (1991), self-directed learning (SDL), encompasses four dimensions: “self-direction” as a personal attribute (*personal autonomy*); “self-direction” as the willingness and capacity to conduct one’s own education (*self-management*); “self-direction” as a mode of organizing instruction in formal settings (*learner-control*); and “self-direction” as the individual, non-institutional pursuit of learning opportunities in the “natural societal setting‟ (*autodidaxy*)” (p.23). In this respect, self-directed learner are held responsible to self-managed learning by identifying their learning needs, goals and resources for learning with an appropriate strategies (Knowles, 1975). Candy’s continues to definition SDL as, Furthermore, s, which aims to broaden our understanding of SDL:

Self-direction is at once a social and psychological construct, a philosophical idea, and a literal impossibility; an external manifestation and an internal tendency; both the beginning and the end of lifelong learning; the foundation stone and the keystone of a learning society; a supplement to and a substitute for the formal education system; a vehicle for the mastery of established knowledge and for the transformation of personal understandings; simultaneously a process and a product, a precondition and a purpose.

(Candy, 1991, p. 424)

His definition of SDL which has become one of the main references for this study reflects Knowles’ (1975) understanding of SDL as a common and universal habit of adult learner to be increasingly self-directed as they develop through childhood to adulthood.

Back to the online learning world, learner’s responsibility for their own learning largely depends on their attitude, personal attributes, learning skills, strategies, and time management. Thus, understanding student learning experiences and their readiness in becoming self-directed learner within online learning environment is important. Despite a growing body of literature pertaining to post-graduate student learning experiences at Malaysia universities, only few research examines post-graduate student learning experience in online setting. Hence, there is a need to investigate and understand how adult’s student learn and experienced learning using online tool, resources and activity each day. It is also vital to document challenges such learner face as it allows the lecturers to better prepared to guide the students in directing their learning. At the same time, understanding how online learning assist in fostering SDL can lead to the development of better online andragogical strategies to meet the needs of post-graduate students.

**Literature review**

**Self-directed learning (SDL)**

A review of the SDL research literature indicates that many researchers have offered their definitions of SDL in order to provide a clearer understanding of the concept of SDL. Knowles (1975) for example, describes SDL as a process in which students take control of and responsibility for their own learning by strategically and cautiously plan their learning activity.

In its broadest meaning, self-directed learning [SDL] describes a process in which individuals take the initiative with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies and evaluating learning outcomes.

(Knowles, 1975, p. 18)

Extending Knowles’ (1975) conceptions of SDL, Long (1991, p. 15) defines SDL as ‘a personally directed purposive mental process usually accompanied and supported by behavioural activities involved in the identification and searching out of information’. However, it is arguable that Long’s (1991) view of SDL is vague as it has to some extent ignored the essential role of external factors such as the teachers and learning environment. In line with this perspective, Brockett and Hiemstra (1991, p. 24) stated that ‘self-direction in learning refers to both the external characteristics of an instructional process and the internal characteristics of the learner, where the individual assumes primary responsibility for a learning experience’. Attempting to incorporate the bigger picture of SDL, Candy (1991) takes into account various constructs such as cognitive, behavioural, social and, psychological in defining SDL. His thorough and comprehensive definition of SDL has become the key reference for this study exploring students’ perceptions and experiences of SDL in the context of online learning.

***Understanding SDL in an online learning context***

In recent years, modes of learning have changed from classroom-based learning to electronic learning (eLearning) to mobile learning (mLearning) to ubiquitous learning (uLearning). Online learning has been growing in popularity as an alternate mode of learning in higher education. Online learning refers to instructional environments supported by the internet, whereas it can be fully online or blended with face-to-face interactions. It is a platform for delivering educational content and facilitating instructor-student interaction over a computer network (Shelton & Saltsman, 2005). In this context, internet technologies provides a platform to create, foster, deliver, and facilitating learning, anytime and anywhere (Obringer, 2005). Learning activities within digital environments viewed as a personalized, social, open, emergent and knowledge-pull activity (Chatti et al. 2010). More significantly, digital devices are seamlessly been incorporated to the lives of current students in higher education (Siemens et al. 2015). This student-centered approach perceived as more efficient and effective help to enhance student-learning experiences, opposite to the traditional learning models that is more teacher centered.

One of the predominant features of online learning is student had to be responsible to manage their own learning (Costa et al. 2010). In other words, with or without an instructor present, adult learner have to decide on what to learn, when to learn it, how much to learn, and whether something has been learned well enough (Stephen Brookfield, 2013). Furthermore, within an online learning context, learner’s autonomous ability to work independently and in cooperation with others are important to remain attentive, motivated, and engaged in learning tasks (Dettori & Persico, 2010; Liew et al. 2010). Thus, the central value for successful learning in online learning is SDL. SDL is a concept that is generally refers to the capacity of the learner to exhibit different levels of self-direction in different learning situations. Furthermore, in SDL emphasizes on learner attitude to take an initiative to employ different strategies to make learning meaningful and relevant.

Back to the online setting, learning is becoming increasingly self-directed when learners build their knowledge by participating in virtual worlds, online communities, and social media. Self-directed learner explore learning materials, monitor their learning, reflect and self-evaluate on it (McLoughlin & Lee, 2010). Thus, being digitally literate, possessing a right skills and strategies regarding online learning were important factors in determining how capable adult learners were of being self-directed. Greene et al. (2011) detail a student who are effective at self-regulating their learning will successful in utilizing learning opportunities of internet compare to those who lack this ability will find themselves not competence. Consequently, it is clear that online learning required more control from the learners, especially in planning, monitoring and evaluating learning processes. In particular, there is pressing need to have an adequate understanding of the impact of online learning on adult learner self-direction in Malaysia higher education context.

**Purpose of the research**

Basically, the purpose of this research was to explore self-directed learning (SDL) in the context of online learning from students’ point of view. The key research questions which guided the study are:

1. How do students conceptualise learning in an online context?
2. How do students conceptualise SDL in an online context?
3. To what extent do students perceive themselves technologically literate users?
4. To what extent do students perceive themselves as self-directed learners?
5. What kind of learning process taken place in an online self-directed learning context?

**Methodology**

This study was situated in the constructivist paradigm as it helps researchers to explore research participants’ point of view about SDL in an online learning context (Charmaz, 2014). Adopting a constructivist paradigm which places great value on research participants’ voices and the importance of mutual knowledge construction between researcher and research participants, interview was decided as the best approach to gathering data for this current study. This study used an exploratory case study approach (Creswell, 2009), in which the researcher explore the perceptions of a group of students about SDL in an online learning context.

**Research participants**

Snowball sampling was chosen for this study as it is a simple, economical and efficient sampling technique (Patton, 2002). A total of thirty postgraduate students (n = 11 males, n = 19 females) who participated in the interviews for this study were from three Malaysian public university. n = 16 of the research participants were in the process of completing their masters degree programme, while the rest (n = 14) were doctoral students. All of the research participants received at least ten sessions (lasting for about one hour per session) of an online supervision throughout their study period.

**Data collection procedure**

It was decided that data in this study will be collected through semi-structured interviews because the flexibility of semi-structured interview which allows research participants to express their views freely and willingly. As previously stated, this current study sets out to investigate students’ perspectives of SDL within an online learning context. Therefore, the interview questions were specifically designed to answer the predetermined research questions by asking research participants to reflect their learning and behavior being supervised in an online context. The interview topics were as follow:

1. Students’ conceptualisations of learning in an online context
2. Students’ conceptualisations and understanding of SDL in an online context
3. Students’ perceptions of themselves as technologically literate users
4. Students’ perceptions of themselves as self-directed learners
5. Learning process that takes place when the students are experiencing SDL in an online context

Most of the in-depth semi-structured interviews lasted 45-60 minutes in length and was recorded using iPhone. Prior to the interview session, research participants were asked to sign the Informed Consent form, indicating their willingness to voluntarily participate in the study. Research participants were also reminded that their identities would remain anonymous.

**Data analysis procedure**

Data collected were analyzed using Fereday and Muir-Cochranes’s (2006) hybrid approach of inductive and deductive analysis as it offers rigorous strategies in analyzing complex qualitative data. Interview recordings were manually transcribed in full to make sure the research participants’ actual voices were heard (Chandler, Anstey & Ross, 2015). Informed by the initially determined interview topics, all transcripts were open-coded and organized into clusters of potential themes. The process of coding and categorizing was conducted manually using a paper and pen strategy within individual interview transcripts and across the whole data set. In accordance with the tradition of constructivist grounded theory, the data-driven themes were constantly compared in terms of their consistency within individual interviews and across the entire data set. New and unexpected data were constantly compared with the findings from previous studies.

**Findings**

# Considering oneself technologically literate users increase self-efficacy and promote SDL

All of the research participants expressed that they considered themselves technologically literate users, in which they had access to various types of technology devices such as personal computers, laptops, tablets, and smartphones. Furthermore, they also described various web-based software that they used regularly like Yahoo Mail, Gmail, Hotmail, and google docs. A point to note, a majority of the research participants reported that experiences and familiarity using different web-based applications and devices, lead to increasing self-efficacy which help to enhance their educational experiences.

…I have smartphone, ipad, laptop and desktop computer that I usually used for personal, academic and work used…

(A-12)

I feel that it is easy for me to use certain app in doing my homework if I’ve previously experienced it.

(D-20)

Finally, some of the research participants reported that they are motivated to complete a degree within prescribed time frame in order to pursue other life goals. On the other hand, some of the research participants were driven by the positive implications of obtaining a degree, particularly in the workplace such as promotional opportunities and career transitions. Despite their contrasting perspectives, the majority of the research participants agreed that being goal-oriented helps to drive their SDL especially in overcoming technological barriers that may hinder successful learning.

**SDL is a flexible way of learning – learner control**

The majority of research participants specified that SDL involves them planning and selecting important areas which they wish to study by identifying their own learning needs. Furthermore, SDL allows planned strategies to be flexible modified to meet current needs. For example,

I think SDL is about what I recognize is important for me to learn.

1. 24)

Basically, SDL is I have to decide what I want, how I plan to achieve and when I choose to do it. SDL allows flexibility, when my planned strategy is not working or when I am facing some limitations such as no access to certain resources, I can flexible change or alter the strategy.

(C-18)

Some of the research participants suggested that in contrast to traditional learning experience, SDL especially within online context offer both freedom and flexibility which are attractive to them. This is because, the research participants added, as adult learners, being in control of one’s own learning is some sort of an acknowledgement and recognition of their ability to learn independently. Moreover, having online learning platform help the research participants in juggling with social activity and workplace demand as well as academic task, while at the same time improved their SDL skills. In this essence, the majority of the research participants agreed that in an online learning context, they are position as active learner who are in-charged of taking control of their learning process and being responsible of making sure their learning is successful.

It is not easy when it comes to managing family matters and study matters. I need to balance them. So, I think SDL in online context is very helpful as I can learn whenever I want, wherever I want while sorting my family matters.

(E- 14)

# Technology as catalyst to SDL process in the context of online learning

All of the research participant agreed that technology supports SDL as it support lifelong learning beyond the traditional classroom. In the context of online learning, all research participants described SDL as a series of process which include: (i) selecting learning materials, (ii) self-monitoring their learning activity and pace, and (iii) self-assessing the effectiveness of their plan strategies in achieving their learning goal.

SDL especially in online learning context helps me to take charge of my learning as I can strategically select what I want to learn and monitoring my learning effectively.

(B-10)

Research participants were asked about the process of making decision. Some examples of how the research participants planned their learning are illustrated as follows:

I used a lot of tools to keep myself organized and systematic. For example, I prefer to use google docs as I can simultaneously edit my work while my supervisors were checking on my work. Moreover, I am not worried of losing my work as it was save in online space.

(E-30)

I would ensure that I kept a weekly planner on my smartphone as well as on my laptop calendar to keep me alert to adhere deadlines and to double check myself.

(D-25)

In conclusion, the research participants suggested that technology provides boundless access for them to connect with others, exploring various topics of interest and providing higher flexibility to them in organizing their own resources, adopting their own learning styles and deciding to study individually or collaboratively. Clearly, technology has significant impacts for the development of SDL.

# Discussion and implications for future research

The purpose of this research was to investigate students’ perspectives of SDL within an online learning context. Three major themes emerged from critical analysis of the interview data. The themes include: (i) Considering oneself technologically literate users increase self-efficacy and promote SDL, (ii) SDL is a flexible way of learning – learner control, and (iii) Technology as catalyst to SDL process in the context of online learning.

When analyzing learner control in the online context, the key characteristics of increasing control over their own learning particularly in terms of the flexibility of time, place of learning and types of learning activity emerged. This relationship between SDL and learner control closely aligns with Boud & Bridge’s (1975) dimensions of SDL which places a greater emphasis on self-learning pace and method. In this regard, the flexibility of an online learning environment leads to increased self-direction. While retaining autonomy in the individual’s learning process, the SDL processes of selecting, monitoring and assessing one’s learning were enhanced with technology as it drives for a more integrative learning process. In relation to research participants’ self-efficacy and readiness for SDL in the online context, the research participants discussed how their familiarity with technology increases their confidence in their ability to self-direct their learning in the online context.

A critical analysis of this study’s findings contributes to the understanding of SDL in the online learning context in terms of learner experiences and perspectives which addresses learner control and self-efficacy as essential part of SDL. With much of the research on SDL rooted in traditional learning setting, future research exploring the adult learning theory in the online environment is crucial to (i) increase our understanding of SDL in the online learning environment, (ii) offer SDL an alternative platform other than the traditional face-to-face context, and (iii) explore learning activities that could promoted SDL in online context.

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