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SELF-REGULATED LEARNING AS A CORNERSTONE OF DISTANCE EDUCATION

Abstract

Advance in technology and communication has radically transformed all levels of education. With the easy access to various technological innovations and online tools, learning has gradually shifted towards computer-mediated classrooms with a wide availability of tools and resources most suited to learners' learning differences and styles. Distance learning has recently been given great attention as it opens the doors to learners who seek to learn and develop their potential and skills despite age, space or time. Nevertheless, this exposure to myriads of technologies and online tools represents real challenges for learners like loss of control, time management deficiencies, lack of leadership skills, social networking addiction, etc. To minimise these challenges, educators need to focus upon the development of personal skills and help learners regulate their cognition, emotions and behaviour in order to manage the social learning environment. The ability to develop personal skills and regulate one's own learning is defined as self-regulated learning. This personal constructive learning approach can be considered the cornerstone of an effective development of distance education. Throughout this study, we sought to explore this concept of self-regulated learning and explain how it relates to distance education. In an attempt to link the two constructs, the present paper derives its theoretical foundation from the social cognitive theory of Bandura and Zimmerman.

Key words: distance education, self-regulated learning, social cognitive theory.

1. Introduction

One of the major objectives of education today is to develop learners' academic potential and lifelong skills in order to develop the academic domain, prepare learners for the professional life and integrate them in the social life as well. These purposes have changed as long as societies have been evolving. As a result, the way knowledge is delivered has completely changed following societies' needs and individual differences and learning styles. New educational programs and systems have emerged. Education has evolved from traditional to modern teaching and learning. There has been a move away from classrooms where the teacher is the authority and the sole source of knowledge to learner-centered classrooms then to more asynchronous types of education. Development in the educational field made it possible for learners to acquire knowledge, develop their skills and pursue their educational goals regardless of the constraints of physical presence imposed by face-to-face education. Lessons, workshops and tutorials are now delivered online. This type of education that is distance learning or distance education opened new paths to learners to learn and

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advance in their lives regardless of age, time, place or social and cultural differences. Learners are now able to acquire knowledge and develop their potential at distance. Yet, distance education is not as simple or easy as learners may think; it represents a process that is multifaceted; thus, it can be hindered by many factors. Based on this, the aims of this research paper are twofold. First, we aim at exploring the concept of distance education from its wide range of uses in order to get a full understanding of this process. Then, we seek to cope with the challenges that hinder distance education by fostering the development of personal and social skills among learners at distance.

2. Review of the Literature

2.1. Distance Education

Distance education or distance learning is a type of nontraditional education. The words that make up the term refer to: “... *teaching and learning, the imparting and/or acquiring of knowledge via methods used because teachers and learners are at a distance from each other.....regardless ... of the limitations of space and time, social and economic inequalities among learners, geographic isolation, and cultural differences.*” (Wedemeyer, 1981: 49). This definition emphasises the physical distance between the instructor and the learner which represents the key feature of distance education. Yet, it remains a traditional conceptualisation. With the rapid growth in the world, the use of technology has become indispensable for every person; people need to use a wide range of information and communication technologies to interact with the world and cope with its challenges. This technological development and globalisation created a new generation called ‘digital natives’ who depend on technology in every corner of their lives. Education has then become associated with the new technologies and distance education has evolved from traditional correspondence types of delivery of knowledge to online delivery. From this perspective, distance education is defined by Keegan (1995: 7) “*as a technological separation of teacher and learner which frees the student from the necessity of travelling to “a fixed place, at a fixed time, to meet a fixed person, in order to be trained or educated.*” From the definition above, what makes distance education different today is that learning takes place via technology. Nevertheless, a common misconception of distance education is that teachers and learners may think that it refers to the substitution of the classroom with technology. To correct this misconception, we need to explore the term distance education from the wide range of its uses. A thorough definition is presented by Greenberg (1998: 36) who defines contemporary distance learning as “*a planned teaching/learning experience that uses a wide spectrum of technologies to reach learners at a distance and is designed to encourage learner interaction and certification of learning.*” In the same vein, Wedemeyer (1981: 111) further explains: “*what is different about learning via technology today is the scope of learnings facilitated by technology, the altered roles of teachers and learners, the changed environment for learning necessitated by technology, and the sophistication of the processes used in developing instruction that will be communicated by technology.*” In these conceptualisations, Greenberg and Wedemeyer make it clear that distance education is not about letting learners learn alone, but it requires planning and instruction. They also highlight different

features of contemporary distance education which show that it is a complex concept. Based on the ultimate goal of education, the process of learning in distance education can be considered similar to classroom learning. Learning refers to the development of skills and potential and teachers have the role of facilitating this process. The most apparent difference is the physical distance between learners and teachers that is facilitated by technology. Yet, this absence of physical interaction between instructors and learners puts both of them in different relationships from that of classrooms. Sharma, Dick, Chin & Land (2007) explain that in distance education, learners may experience a sense of isolation; as a result, in order to be successful, they must rely more on their individual abilities to regulate their learning. That is, learners have to be independent and take their full responsibility to develop their potential and regulate the learning process by themselves. Similarly, Threlkeld & Brezoska (1994) advocate that successful learners need to have a number of characteristics such as tolerance for ambiguity, high level of autonomy and an ability to be flexible. Moreover, Hardy and Boaz (1997: 43) found that “*compared to most face-to-face learning environments, distance learning requires students to be more focused, better time managers, and to be able to work independently and with group members.*” (as cited in valentine, 2002: 7). The authors cited above highlight that in distance education learning is a personal and complex process; therefore, learners are required to develop some characteristics such as tolerance of ambiguity, autonomy, flexibility, responsibility, independence and strategy use. Additionally, the mere reliance of digital natives on technology may create challenges for this type of education. So, another problem related to distance education is the misuse of technology (Valentine, 2002). Given the potential limitations associated with the uncontrolled use of technology by digital natives and the misconceptions about distance education, it is necessary for educators to raise awareness of the factors that influence learners’ achievement and engagement in distance learning. To overcome such challenges, learners need to be self-regulated in order to monitor and control both internal and external factors related to their learning.

2.2. Self-regulated Learning

Self-regulated learning is generally defined as a personal, constructive process whereby learners set goals for their learning and then attempt to monitor, regulate, and control the factors affecting their learning (Pintrich, 2000). This definition describes self-regulated learning as the extent to which learners are actively involved in regulating and managing their own learning. Self-regulated learning has been approached from different standpoints resulting in the emergence of different theories and models of self-regulated learning. Nevertheless, all the theories and models share common assumptions about the active role of the learner in both learning and self-regulation processes. To fit the purpose of the present work, our choice falls upon the social cognitive theory of self-regulated learning. The social cognitive perspective of self-regulation provides a framework for online education research that can offer insights into the functioning of autonomous learners (Lynch & Dembo, 2004). From this perspective, learning is the reciprocal interaction among personal (cognitive and affective), behavioural and environmental factors as shown in figure 1 below and

learners regulate their learning by monitoring these factors (Zimmerman, 1989: 330).

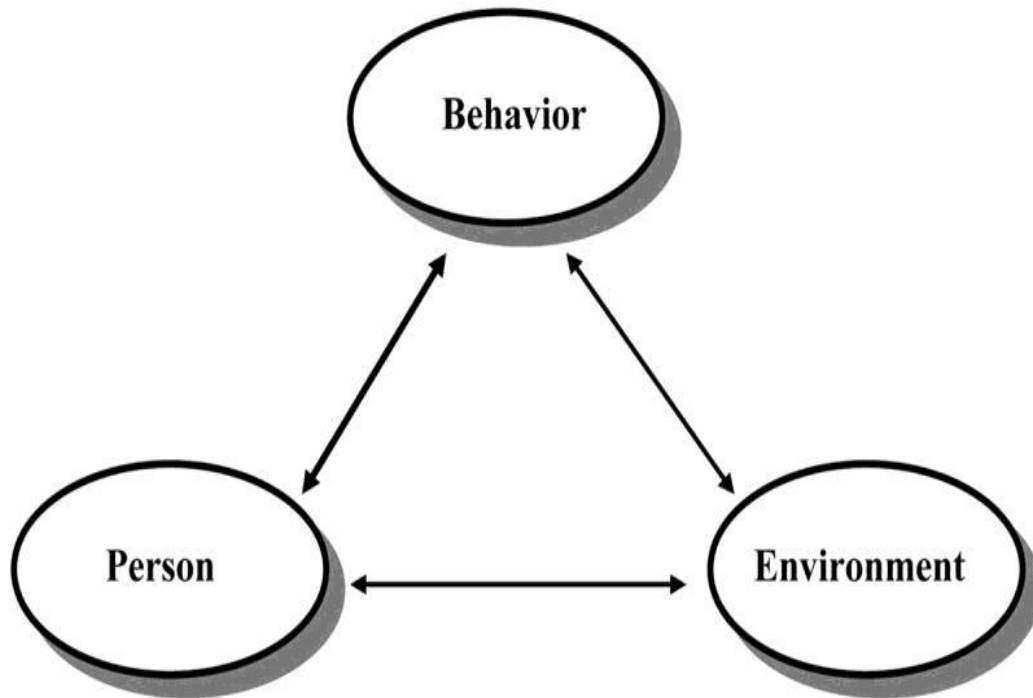


Figure 1

Bandura's model of reciprocal interactions (adopted from Schunk & Zimmerman, 2007: 2).

Put differently, learners are said to regulate their learning when they take full responsibility for their learning and proactively monitor and control their cognition, emotion, behaviour and the social learning environment. The interaction between these three basic elements is what constitutes the triadic reciprocity of self-regulation (Hodges, 2005: 376). Personal factors refer to learners' meta-cognitive awareness, the cognitive processes involved in learning and the motivational and affective factors that may foster or hinder their learning. Behavioural factors are represented by Bandura (1991) in three internal sub-functions that result from one's interaction with the environment: self-observation, self-judgment, and self-reaction. These behavioural components provide important self-diagnostic information that result in self-direction of learning. Environmental components refer to the features of the social environment in which learning takes place and which include the teacher, peers and in our case the technological mediums used.

Distance learning is characterised by the physical absence of the instructor and the use of various types of technologies which make it a highly demanding and challenging process. So learners need to take a proactive role in monitoring and regulating both internal and external factors related to their learning. Self-regulated learners are characterised by the use of different strategies and self-regulatory processes that enable them to monitor, manage and regulate their learning. These processes play the role of a mediator between the individual and the social learning environment. In this regard, Zimmerman, Bonner and Kovach (1996: 141) explain that self-regulated learning involves goal setting, strategy

use, self-monitoring and self-adjustment to acquire a skill. This definition caters some self-regulatory processes learners use when regulating their learning and which are: goal setting, self-monitoring and self-adjustment. Besides, Wolters, Pintrich and Karabenick (2003) advocate that one of the central aspects of self-regulation is the actual selection and use of various cognitive strategies for memory, learning, reasoning, problem solving, and thinking.

Schunk (2009: 806) advocates that the social cognitive theory emphasises three key elements: the active role of learners, their motivational beliefs as well as the cyclical nature of self-regulated learning. First, self-regulated learners are proactively engaged in the learning process and exert control over their learning. Second, self-regulation depends on motivational factors such as: goals, expectations and self-efficacy. That is, learners who are motivated, set goals and have high self-efficacy beliefs are more likely to engage in self-regulation. Third, self-regulation is a cyclical process involving many factors, internal and external as already mentioned, that typically change during learning.

2.2. Self-regulation in Distance Learning

Research on self-regulation in the context of education focuses on how learners regulate their learning experiences in order to become successful learners (Wolters et al, 2003). A review of studies in the field of self-regulated learning shows that researchers have focused on the application of models of self-regulation on face-to-face classrooms; however, their application to distance education has received little attention. Niemi, Nevgi and Virtanen (2003) emphasise the need for teachers to integrate self-regulation into their distance education courses and learn how to use the new tools on the internet to support learners' distance learning. Similarly, Sharma, Dick, Chin and Land (2007) claim the need for self-regulation training in distance education. Distance education theory implies that learners should possess certain self-regulatory attributes to effectively succeed in their learning, i.e., the development of distance education depends on high levels of self-regulation. For instance, Zimmermen (2002) and Järvelä and Järvenoja (2011) explained that learners who learn to use self-regulated learning strategies increase their attention, efforts and persistence; they can plan, monitor, control and regulate the learning process. In the same line of research, Niemi, Nevgi and Virtanen (2003: 2) argue: *“Learners’ repertoire of strategies to monitor their learning processes, and their willingness to invoke such strategies, will dramatically affect their ability to manage the wealth of information found on the Internet”*. In their study, Sharma, Dick, Chin and Land (2007) found that distance learners with higher levels of self-regulation were likely to have better distance learning performance.

Self-regulatory processes are different from one learner to another, yet there are common self-regulatory attributes that have shown their effectiveness in promoting distance learning. These self-regulatory processes include: motivational beliefs, environment and time management skills and help seeking. This was demonstrated in Lynch and Dembo's (2004) study investigating the relationship between self-regulation and online learning. They concluded that five self-regulatory attributes were demonstrated to be predictive of academic performance: intrinsic goal orientation, self-efficacy for learning and performance, time and study environment management, help seeking, and

internet self-efficacy. Motivational strategies describe activities in which learners make efforts to increase their intrinsic interest for learning, the relevance and meaningfulness of learning tasks by linking them to personal experiences and interests (Wolters et al, 2003: 19). First, self-efficacy beliefs play a significant role in learners’ learning and achievement (Bandura, 1991; Schunk & Zimmerman, 2007). This motivational factor is defined as “*the judgments that individuals hold about their capabilities to learn or to perform courses of action at designated levels*” (Pajares, 2009: 791). Schunk and Zimmerman (2007) explain this as learners with high self-efficacy beliefs work harder, persist longer when facing difficulties and achieve higher levels compared to learners who are not sure of their capabilities. Second, goal-setting is another motivational factor that affects learners. Beatty-Guenter (2001) identified goal orientation as a significant attribute for course completion in distance education (as cited in Lynch & Dembo, 2004). Concerning environment structuring, it refers to learners’ efforts to manage the learning environment and minimise distractions (OMalley, Russo, Chamot, & Stewner-Manzanares, 1988; O’Malley and Chamot, 1990). Another important self-regulatory attribute in distance learning is learners’ ability to effectively manage their time (Kearsley, 2000; Phipps and Merisotis, 1999; as cited in Lynch & Dembo, 2004). Yet, it is not the amount of time spent that is important, but rather its effective use and management (Whisler 2004, as cited in Sharma, Dick, Chin & Land; 2007: 386). Based on the complex nature of distance education, an important factor determining learners’ success is help seeking. Help seeking refers to learners’ tendency and efforts to solicit help from experts. All in all, different self-regulatory processes and skills are associated with distance learning. Therefore, it is important to encourage the development of self-regulation among distance learners. In this regard, educators and teachers play an important role in integrating self-regulation into distance education and develop learners’ ability to self-regulate their learning. Based on what has been discussed so far, this paper provides some suggestions for both teachers and learners to facilitate the integration of self-regulation into distance education.

Learners’ role	Teachers’ role
Change their attitudes towards distance learning, Develop a sense of responsibility for their learning, Set goals for their learning, Analyse task requirements, plan for effective strategies, – Use and adjust these strategies Manage their time effectively, Control their emotions and minimise distractions,	Raise learners’ awareness of self-regulation, Create opportunities for self-regulation, Support learners’ learning through different activities , Help learners control their emotions, Provide feedback on both their learning progress and self-regulation strategies, Encourage interaction and collaboration through technology to minimise feelings of isolation and loss of control, Encourage problem solving and critical thinking,

– Assess their progress,
Solicit help from peers and teachers.

The need for teacher training on self-regulation.

3. Conclusion

Learners' self-regulation can be considered a cornerstone of an effective development of distance education. The current paper reviewed the distance education and self-regulated learning literatures. It updated our understanding of self-regulated learning, identified the core issues surrounding distance education and explored learner self-regulatory skills predictive of academic success in a distance education context. Based on this, we can conclude that self-regulation plays an important role in successful learning in a distance education context. Learners need to use a wide range of self-regulatory processes and skills in order to self-regulate their learning. Motivational beliefs, environment structuring and time management skills as well as help seeking strategies are all important self-regulatory attributes for successful learning. Building on this, there is a need to raise awareness among educators and learners of the importance of self-regulation in distance education contexts where different variables are interacting therefore affecting both learning and teaching. Yet, only limited research has been conducted to empirically investigate self-regulated learning within distance education contexts. So, further investigations are highly required.

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