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ABSTRACT

This paper examines the role of self-direction in online learning by integrating elements of individual and collective engagement as significant aspects of learning. By making the claim that online instruction draws on autonomous and social aspects of learning, this paper examines how online teaching environments are informed through an orientation of social constructivism in learning that requires educators and learners to recognize the value of inquiry and higher order learning (Garrison, 2011) through individual reflection and collaborative discussion. Recognizing specific challenges for educators and learners through a combination of high learner expectation and autonomy, this discussion proposes how a focus on individual control and group responsibility addresses complexities in online learning. This examination of practice proposes a two point focus on individual responsibility and active collaboration underscored by educator support to help build success in online learning.

Keywords: online learning, adult education, self-directed learning, inquiry, constructivism, learner responsibility, learner autonomy, active learning, collaborative engagement

INTRODUCTION

As online learning gains more popularity and reputability in 21st century learning environments, learners and educators alike need to adapt to the growing need to participate in a variety of learning projects, including online learning. A derivative of self-directed learning, online learning has replaced the project based notion of independent learning and created educational situations that rely on highly interactive and cooperative styles of learning (Karakas & Manisaligil, 2012). Colorado & Erberle (2010) define online learning as textual, graphic, audio and video representations of the World Wide Web forming components of learning. As opposed to traditionally static forms of independent learning, online learning establishes dynamic and educational environments transactional that recognize a framework that is individual and, at the same time, social (Garrison, 2011). With that, this type of highly individualized yet collaborative learning introduces a new set of complexities and concerns for teaching and learning (Colorado & Eberle, 2010; Plews, 2016).

According to Garrison (2017), e-learning is not a novel idea, but one that is based on traditional values of discourse and collaborative inquiry. What may be unique about online learning is attention to authenticity and the notion of using textual representation for the purposes of learning (Garrison, 2011; 2017). Because of a focus on text based communication, online learning attenuates a need for reflection and discourse. Focussing on learner action facilitated by instructor presence, online learning places an emphasis on social and autonomous aspects learning include: active that engagement, collaborative discourse, reflection and opportunities for critical thought (Lewis, 2010). Through a detailed discussion of learner needs, context, motivation and readiness for learning, this paper explores Garrison's, (1997; 2017) "collaborative constructionist" theory of how online learning combines elements of individual cognition to collective engagement and makes suggestions for practice in this area of instruction.

ON-LINE LEARNERS

A generation of independent yet socially motivated learners comes with high expectations for learning and for achievement in their desired areas of study (Allen, 2005). In a recent study of online learning, Plew (2016) outlines a sampling of online learners as Caucasian females in their mid-thirties who work for an employer that offers reimbursement for learning and are not

likely the first from their families of origin to attend post-secondary learning.

Viewing this group as representative of online learners reinforces the notion that online learners may come to the learning situation highly motivated yet under pressure to perform or achieve for a number of reasons, including:

- There may be a need to meet requirements set out by employers who are paying for the education; and,
- Learners may be competing with previous family members who have had successful learning experiences.

Exemplifying the conditions of this particular sampling, learners who appear to be highly motivated may also be under stress to succeed. This creates a paradox for self-directed learning where learners mav be looking for straightforward or prescriptive avenues to achieve success while educators are anticipating a high degree of autonomy, creativity and selfdirection in learning. Although learners may desire a high degree of autonomy, they are, at the same time, faced with the task of having to learn how to self-advocate and understand learning tasks without the benefit of an on-site instructor (Garrison, 1997; Lieberman & Linn, 1991). The collusion of these dynamics creates learning situations where learners are at risk for becoming apprehensive in isolated and technologically reliant learning environments while retaining a strong motivation to succeed. This is especially relevant in distance learning situations where learners do not have access to outside support, which is an element that can serve to reduce worries and doubts about learning.

In reality, learners may enjoy the convenience of online learning, yet having perhaps come from traditional educational environments, they may be unsure about how to navigate in environments with lessened control. The need, therefore, to facilitate the transition from traditional to technical learner must be addressed (Colorado & Eberle, 2010; Garrison & Cleveland-Innis, 2005; Karakas & Manisaligil, 2012). It is this shift in teaching and learning that requires adult educators to be cognizant and responsive in managing learner self-direction and motivation, particularly in environments where learners hold a high expectation for success.

A CONSTRUCTIVIST APPROACH TO LEARNING

Knowles (1975) defines self-direction in learning as a process in which individuals take initiative to determine needs, assess goals, and identify resources and strategies for learning. Because these skills recognize an educator's role as more of a guide or facilitator of knowledge rather than a director and manager of activities, they are important for learners to acquire in the transition from face to face to online formats of learning. Though Garrison (2011) indicates that there are times for direct instruction within online learning environments, the role of educators primarily involves the of learning and moderating facilitation discussions. In most cases, the success of online learning is based on learner ability to maintain a cognitive presence (the ability to reflect on, construct and validate meaning) and a social presence (the ability to communicate and develop relationships) to complete course goals (Garrison, 2017).

Because of the isolated nature of online learning, the onus for self-direction in consolidating autonomous and social aspects of learning is placed on the learners. In these types of situations, learners themselves generate knowledge through active learning and exploration of concepts through learner initiated consultation and dialogue (Allen, 2005: Garrison, 2017). This combination of the social and autonomous creates situations where learners must reduce dependence on the instructor for direction and learn to think critically about concepts presented during instruction and engagement others with (Garrison, 2017).

Garrison (1997; 2017) refers to self-direction that is evidenced in these types of learning environments as "collaborative constructivist". He defines this in the following way:

A collaborative perspective has the individual taking responsibility for constructing meaning while including the participation of others in confirming worthwhile knowledge. Meaningfulness and worth whileness reflect the cognitive and social perspectives of an educational experience. Therefore, meaning and knowledge are both personally and socially constructed. This balanced integration of cognitive and collaborative learning processes, therefore, defines learning outcomes as both personally meaningful and socially worthwhile. (Garrison, 1997, p. 18)

In essence, online learning relies on learner ability to make meaning through an ability to take initiative in learning, engage with other learners using writing as the primary form of communication, self-advocate, and construct understanding through active engagement and limited immediate feedback.

Developing the confidence, social skills and sense of autonomy to successfully complete individual and collaborative activities requires a good sense of self and a balanced identity (Allen, 2005). In this case, reliance on course participants that form the group of learners for reinforcement of learning and constructing knowledge is a key part of this learning. While establishing a means for bonding with course members, cohesive activities detract attention from the educator as primary source of knowledge and point to the establishment of collective knowledge to interpret and make meaning of course materials. The result is that learners who may be accustomed to directing their activities towards educators' expectations rather than deriving their knowledge primarily through individual interpretation and discussion of the textual materials and educational content must learn to become self-reliant and able to self-assess with respect to course participation and completion of learning tasks.

With an educator who is only partially present, learning becomes constructivist in nature and socio-constructive in practice where the objective is to construct knowledge through individual reflection on the content and resource materials in tandem with active engagement with other learners. Garrison (2017), this type of inquiry is representative of a transactional view of learning that requires learners first to construct meaning through reflecting on content and then verify understanding within a community of inquirers. According to Garrison and Cleveland-Innis (2005) indicate how- this approach to teaching invokes a higher-order of cognition that emerges from a supportive, flexible and critical community of learning. Drawing on Dewey's (1938) notion of control and responsibility in learning, this represents an overlapping process of individual effort and control of learning combined with a group process of collective responsibility that can be visualized as follows:



Fig1. Interconnectivity of individual and collaborative effort

As noted in the diagram above (Figure 1), online learning has transformed the nature of selfdirected learning by creating a desire to communicate through inquiry based, collaborative spaces (Garrison, 2017; Karakas & Manisaligil, 2012). This changes the nature of self-directed learning in that it responds to the human need for community and contact with others for support, verification and exploration of contextual meaning. In other words, motivation for selfdirection and independent learning is supported through a desire to form online communities of learning.

MOTIVATION AND READINESS FOR LEARNING

Adults, whether or not they are traditional learners seeking to add to their educational portfolios or non-traditional learners who are reentering learning situations after a period of absence, must reframe their perception of learning in order to be successful in self-directed or computerized learning environments (Lieberman & Linn, 1991). In this case, learners are required to adapt to a new framework by "learning how to learn" (Lieberman & Linn, 1991; Merriam, Caffarella and Baumgartner, 2007).

Merriam et al. (2007) indicate that the process of learning involves acquiring and applying knowledge to learning situations by taking control of needs, individual learning style, and training for specific instructional formats. For learners in self-directed environments, this translates to a focus on three main components of learning: "topic knowledge, procedural skills, and self-monitoring" (Lieberman and Linn, 1991, p. 374). To accomplish the task of learning how to learn, Lieberman and Linn suggest that self-directed learners develop an extensive repertoire of problem solving strategies, or procedural skills. Educators are

able to facilitate this adaptation to new instructional formats by including:

- Explicit instruction on topic, strategies and learning skills;
- Scaffolding through prompts, feedback and remediation to support learning; and
- Encouragement to develop confidence in self-directed learning.

Colorado & Eberle (2010) suggest a list of learning strategies that enables learners to prepare for and succeed in online learning, these include: "rehearsal, elaboration, metacognitive self-regulation, time and study environment, effort regulation, peer learning and help seeking" (p. 6). Many of these points and skills are related to Garrison's (1997) proposal of a three tiered model for self-directed learning that includes: self-management, self-monitoring, and motivation. Key to success in online learning is the ability to self-manage, recognize what is required at significant moments in learning, and a responsive develop attitude towards performing learning tasks.

The capacity for learners to recognize what is required of them in learning situations is essential to taking on a responsive attitude and self-managing; still, this ability is dependent upon the development of rapport amongst the educator and learners. In research on web-based learning, Ng (2008) discusses the concept of disparity amongst educators and learners when they find themselves in ambiguous learning situations. He highlights the importance of learners being able to conceptualize course requirements and seek clarification in the following:

The disparity in students and teacher's thinking highlights desires and expectations that are not quite in tune with each other. This type of conflict may not create harmony between teaching and learning processes and could hinder learning. The computer is able to offer a wider variety of teaching formats at the one time, catering for different learning styles, interests and abilities. Hence, teaching students to ask appropriate questions when in doubt and how to search for answers from various resources are important skills that will help develop them into better self-directed learners. (p. 30)

Negotiation and questioning skills that are often taken for granted in traditional learning environments need to be specifically outlined in online learning situations (Colorado & Eberle, 2010). Most significantly, the absence of a physically present instructor poses challenges for learners in that they can no longer rely on gestures and body language for reinforcement of learning. This is a disadvantage because the strength of many educators lies in the ability to fill in gaps of information "on the fly" for learners (Duelen, 2013).In essence, decreased facility to relay essential information through physical presence impacts educator effectiveness and learner ability to respond to educator expectations. In this case, educators must become accustomed to predicting and anticipating learner needs while learners need to develop skills of inquiry and self-advocacy.

It is realistic to claim that online learning environments do not easily relay subtleties and nuances that are normally a part of learning. These are aspects of learning related to managing emotions and stress. Colorado and Eberle (2010) expand on the connection and incorporation of individual responsibility into collective tasks as part of learning by exploring how self-regulation strategies include a use of Meta cognition to manage learning tasks and to understand content and expectations to support collaborative efforts within the learning environment. They explain:

Students must actively control their behavior by monitoring progress and adjusting the use of a strategy to assist with the task. The second component of self-regulated learning is the degree to which this task is completed, or the goal. The student must adjust the use of a cognitive strategy in order to achieve his or her objective. The third component is that the individual student must control his or her actions. A student may change a behavior in reaction to an instructor requirement; however. after the requirement is removed, the student may no longer engage in the behavior. These three self-regulated learning components are necessary to regulate student behavior and use of cognitive strategies. (p. 6)

In this case, what is normally the responsibility of the instructor to motivate, praise or encourage learners may fall upon collaborative activities of other learners within the learning context.

Garrison (2011) suggests this in the following: "While student motivation may initially be high. sustaining this motivation throughout the course of studies will, to a considerable extent, be a function of cohesion and collaboration" (p. 89). Lewis (2010) reinforces the idea that effective critical collaboration is dependent on allowing time for processing course expectations and reflection on content. Both of these elements relate to how learners must negotiate ways of constructing understanding through periods of discussion. communication. and personal reflection on meaning.

Still, learners need time to perform these functions, and in time-pressured on-line learning environments, this may be difficult to achieve (Cameron & Limberger, 2004). This reinforces the necessity of learners understanding the requirements for learning at the onset of course and program delivery and reflecting on the content before participating in discussion. Garrision (2017) notes how educators need to set the tone for learning and ensure their availability throughout the course of instruction. He indicates that course design and preparation should reinforce teacher presence through establishing feelings of trust and a sense of belonging to a critical community of learning; promoting a conversational tone and questioning approach to learning; and, supporting learners' willingness to engage and exercise control within the learning process. These objectives can be achieved in a number of ways including prioritizing explicit expectations for course requirements and initiating contact with course participants.

CREATING A COMMUNITY OF LEARNING

Karakas and Manisaligil (2012) suggest that there is a natural affinity between self-directed learning and global connectivity. Similarly, Garrison (2017) notes how establishing a community of inquiry is dependent upon the connection of individual participant's cognitive presence and willingness to interact with other learners. Karakas and Manisaligil reinforce the association of these elements by stating that "self-directed learners are embedded in a set of relationships and networks within the digital ecosystem, they are well equipped to be active citizens and informed decision makers in a hyper-connected society" (p. 718). In fact, the combination of active collaboration on a global level in learning supports action learning in online learning environments. Though there may be varied conceptions about action learning, Cameron and Limberger (2004) note how it is a holistic and developmental view of learning that incorporates individual reflection on knowledge with a collective interpretation and analysis of learning and experience.

Marghardt (2011) defines action learning as a process whereby a group collaborates to solve problems through critical discussion, active questioning and reflective thought. This problem solving approach to learning relates well to the active dialogue moderated through facilitation that is evidenced in online learning. According to Noe, Tews and Dachner (2010), this type of interpersonal dialogue responds well to "action-focused reflection" that embodies transactional styles of learning by combining individual reflection to intra and interpersonal dialogue (p. 289). Noe et al. explain how dialogue in this case means individual reflection or group discussion that involves "hypothesizing, interpreting. questioning, explaining. and evaluating issues and problems" (p. 289).

Learning through discourse and problem solving offers an active way to participate in discussion that is guided and directed through questioning (Marquardt, 2011). In particular, a dialogic approach to learning aligns well with a focus on textual representation and critical thinking that is a feature of online learning. Garrison (2011) acknowledges how the written word reinforces higher order learning through a more intense scrutiny of self and collaborative engagement than would otherwise take place in face to face learning environments. He reflects on the significance of text based communication by noting the natural affinity between the reflection that is required for online discussion and writing as a means to incite critical discourse.

Additionally, an emphasis on participatory discourse based on responding to questions in a reflective and collaborative manner reinforces the notion of educator as guide and facilitator and recognizes the idea that the "learner is at least as important as the instructor" (Noe et al., 2010, p. 281). Moving from an educator centred focus to learner inspired motivation puts the onus on the learner to construct meaning and achieve understanding through "dialogue, collaborative learning, and cooperative learning" (Merriam et al., 2007, p. 292). This view of learning connects well to self-directed aspects of online learning that encourage the personal control of autonomy and social responsibility of collaboration.

IMPLICATIONS FOR PRACTICE

Employing a Constructive Collaborative Framework for Learning

Removing many physical and physiological barriers to learning, online learning enables learners to engage more fully in collaboration and inquiry based learning than traditional lecture based methods of course delivery. In particular, learners are able to maintain a sense of anonymity while participating in communities of inquiry and thereby engage in a collaborative framework of generating meaning and understanding (Soare, 2014). Additionally, in learning situations that are often isolated and distant in nature, a critical and collaborative approach to learning is established as learners rely on individual control of their own effort and group responsibility to decipher, interpret and complete online learning tasks. In fact, decreased educator presence creates learning situations where learners may become more dependent on one another to solve problems and work out resolutions to learning dilemmas. resulting in greater collaboration and reinforcement of a constructive approach to learning (Beck, 2010).

The dynamic of individual and collaborative effort invites learners to participate in realistic problem solving activities that align with their particular needs and preferences of their areas of practice. Engaging learning through an integrative exploration of content, learners are able to acquire content knowledge and develop identities as learners and future professionals and practitioners. Through sharing information by way of engaged dialogue and exploration of learning content, online learning establishes constructive frameworks of learning by using informal networks of collaboration. These provide opportunities for learners to share divergent world views and experiential knowledge (Crawford-Ferre & Wiest, 2012).

Role of the Instructor

Crawford-Ferre & Wiest (2012) outline the role of the instructor as including "managerial, social, pedagogical and technical" skills (p. 13). In an online learning environment, the instructor must not only manage content and motivational aspects of learning, but must be well versed in technology and able to encourage social interaction using that technology. As initiators of social interaction, educators must begin by creating supportive learning environments and setting up "positive and productive relationships" with and among learners that will facilitate a student-centered approach to learning (Crawford-Ferre & Wiest, 2012, p. 13). As such, an online educator must act with purpose and integrity to establish clear guidelines for learning (Crawford-Ferre & Wiest, 2012)

One of the ways educators can initiate discussion with learners is through problem based discourse and interaction. Asking learners to solve problems to achieve learning goals provides a solid direction for discussion and collaboration in addition to making learning interactive, meaningful and relevant (Bender, 2012; Boyer, Maher, & Kirkman, 2006). Throughout a problem solving process, educators facilitate learning by acting as a guide and offering suggestions that can be applied to given learning situations rather than readily supplying answers (Bender, 2012).

Personalizing Learning

In an online learning environment, it is important that educators initiate discussion and offer ways to assist learners as they move through courses and programs. Being available to learners in an indirect and observational role helps to personalize and humanize the learning (Bender, 2012).

Factors that support a personalized approach to instruction include "being supportive and encouraging, giving ample feedback, being a good role model, being appropriately informal, and eliciting discussion" (Bender, 2012, p. 15). All of these elements relate to an educator's ability to develop an attentive and observational stance that recognizes how teaching and learning involves reciprocal communication and responsibility on the part of the learner and the educator (Bender, 2012).

Feedback

Online learning acknowledges ownership of learning by students and marks the relationship of teaching and learning as a collaborative effort where learners are able to demonstrate their learning in tangible ways while educators are able to comment on learning and provide necessary instruction in the form of feedback and providing direction based on work created by students (Miller & Morgaine, 2009). This approach to learning allows learners to receive feedback on learning tasks and reflect on learning as they progress through courses and programs.

Offering feedback provides opportunities for learners to learn by validating, revising or restructuring their thinking (Guo, Chen, Lei & Wen, 2014). In particular, formative feedback offered within the context of course discussions generates the flow of ideas, guides learning, encourages deeper inquiry and helps create links from theory to practice (Guo et al., 2014). In this way, facilitating discussions becomes an instructional tool in itself, providing learners with points of reflection and opportunities to develop critical thought (Garrison, 2017).

Providing meaningful and on-going feedback in online learning helps maintain an awareness of the learning goals and purposes as well as improving confidence and self-esteem in learners (Guo et al., 2014). By validating thought and ideas, educators are able to encourage learners and reduce feelings of isolation and loneliness that may occur in a distance learning situation. In fact, frequent and positive feedback provides an essential purpose for communication that raises learner motivation and promotes inclusion (Bender, 2012). These elements help establish safe learning environments where learners are able to take risks in learning.

Role of the Learner

With a focus on constructive collaboration, online learning relies on learner initiative to participate and engage in dialogue for the purposes of learning. By offering meaningful opportunities for engagement to learners, educators bridge the transactional gap by motivating and instilling responsibility in learners (Bender, 2012). The sense of cohesion that is gained from learners accepting responsibility for their own learning allows them to participate in active discourse. The result is that learners will embark on significant opportunities for gathering and constructing knowledge through independent and collective learning activities.

Self-regulation

In online learning environments, self-regulation is key to success (Rivenburg, 2015). In particular, online learning environments require learners to develop an awareness of their own metacognition in order to construct understanding for themselves (Bover et al., 2006). In other words, the ability for learners to understand what is required of them at specific points in learning is an essential skill that can be developed meta-cognition through and intentional goal setting.

Bender (2012) notes the connection from awareness of individual thought processes or meta-cognition to improvement in selfregulation, understanding and self-regulation. According to her, perception of one's own metacognition can improve long term memory. As Rivenburg (2015), in a study of learning strategies in adult online learning, suggests, the ability to set and attain goals while considering a variety of ways of learning becomes important to attaining self-regulation of learning. Once learners become familiar with ways in which they approach learning individually, they are more able to apply favored skills to the learning process.

Bender (2012) emphasizes that learning to be attentive to not only what is being learned, but to how the learning is expressed and contextualized is a key ingredient to success for online learners. Developing an awareness of expectations by following the lead of the instructor and other colleagues becomes integral to developing an active awareness of course procedures. Of course, the desire to attain knowledge in a given area of study will significantly influence learner attentiveness. In other words, courses that are meaningful and relevant to learners through appealing to learner interest helps to improve self-regulation.

Cognitive Engagement

Cognitive engagement refers to how and to what degree learners are able "to construct and confirm meaning through sustained reflection and discourse in a critical community of

inquiry" (Garrison, Anderson & Archer, 2001,p-11). In a sense cognitive engagement is achieved when learners come together for a specific purpose to achieve similar goals (Allen, 2005; Garrison et al., 2001; Guo et al., 2014). The significance of this in online learning relates to how learners participate in discussion as both a means to an end rather than an end in itself (Garrison et al., 2001). In other words, cognitive engagement through discourse confirms the notion that there is a higher purpose for learning that can be achieved through collective action. When this occurs, learners' knowledge becomes "an act of participation" (Allen, 2005, p. 250).

The reality of building a community of learning and maintaining social interaction is at the basis of online learning. Still, social interaction in and of itself is not sufficient to establish communities of learning and collective engagement (Guo et al, 2014). Cognitive engagement relies on a combination of individual learner motivation that is derived through self-regulation and reinforced by continued interaction with learners as an essential part of constructing meaning, thus creating a community with adequate levels of social, cognitive, and teacher presence (Garrison, Anderson & Archer, 2001).

Effective Online Interaction

The opportunity to interact with other learners is essential to online learning. Researchers in this area of educational practice agree that significant learning is more likely to occur when social interaction and dialogue is enhanced and supported bv instructor feedback and encouragement (Bender, 2014; Cahill, 2014; Garrison, 2017; Guo et al., 2014). Guo et al. (2014) note how the benefits of online learning are primarily determined by the success of establishing and maintaining avenues for dialogue and interaction among learners and between learners and the instructor. As they explain, such dialogue provides a communal space for learners to socially construct knowledge; a place where learners are encouraged to take responsibility for sustained interaction and the advancement of collective knowledge.

Discourse is a key part of learning because the "dialogic mode provides more opportunities for learners to become co-creators of collective understanding and contributors of community knowledge base rather than passive information receivers" (Guo et al., 2014, p. 194). Cahill (2014) recognizes how online instruction presents numerous opportunities for learners to participate in critical reflection through collaborative effort of dialogue and communication. These exchanges of information form a basis to reflect on assumptions, explore social issues and work towards social and global change.

The integral aspect of group discussion within online learning allows learners to make connections from their own realities to those of others and consequently develop a global understanding of issues and current events (Cahill, 2014; Guo et al., 2014). Guo et al. (2014) reinforce this notion by articulating how the socio-cognitive dynamics of online discourse encourages deep learning through establishing "constructive. collaborative, intentional and authentic learning experiences" that facilitate critical and independent thought (p. 194).

According to Boyer et al. (2006), the promotion of group work and a focus on forming

communities of learning reduces fear and stress in learners thanks to the ability to discuss elements and approaches to learning with other classmates. Once learners take the necessary first steps of moving from a feeling of being an outsider to actively engaging in course discussions, they are less likely to feel anxious, defensive or unwilling to take risks in learning (Bender, 2012).

CONCLUSION

Online learning presents several challenges for both the educator and learner, particularly in situations where learners have been conditioned to rely on a strong instructor presence with motivational strategies that include immediate feedback and on-site monitoring of progress. However, once learners develop a capacity for reflection on ideas and self-monitoring, they are able to recognize the value in allowing time and space for a reflective communication process that is a part of this type of learning. Taking time to reflect on content and evaluate their own approaches to learning, learners become more self-reliant through a collective learning process that is driven by self-management and individual input. The hope is that this focus on individual effort within collective educational environments has the result of forming learners who become highly engaged in the learning process and are able to appreciate learning as a lifelong pursuit.

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