Potential of Technology-Mediated Online Learning System Via Social Networking Sites

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Abstract

The emergence of social networking sites has transformed learning environment with new learning opportunities for interaction via access to online learning community. This changes has shown that social media networking site represent a future pathway to enhance the learning experience and improve learning outcome. Interestingly, interactive learning environment afforded by online social networking site such as Facebook and Twitter enables its users to conveniently access online materials, socialize with other learners and communicate with their instructors. With the view that social networking site has grown to become an effective learning avenue that supports social and instructional expectations, this study reported various opportunities that can be explored to enrich learning outcome. Technological impact of online learning were discussed as well as various forms of interaction associated with online learning based on social networking sites.

Keywords: Social networking sites, Learning interaction, Technology, Online learning, Instructor and learners.

1. Introduction

Technological features of the emerging social networking sites have rapidly transformed convention face-to-face learning system to integrate more effective communication that enables learners to easily learn and interact with other online users (Miller, 2009). Numerous evidences exists that supports the changes brought about by technology in the learning environment especially online system (Dittmar, 2009; Irlbeck, Kays, Jones, & Sims, 2006). Thus, the new learning opportunities from the integration of internet resources widens the scope of learning and extends conventional classroom to incorporate isolated areas which was not possible prior to the use of technology for learning (Blackall, 2005; Onwuegbuzie & Collins, 2007). Social media networking site represent a huge community for collaborative and interactive learning that enables learners to access, create and directly communicates to share and dessiminate information. In online learning system, learners usually interact using learner-to-learner and learners-to-instructor format in establishing discussion within the learning environment.

Most learning materials are similar to the instructional design structure of individual work used in the first generation with limited interaction between students (Freishtat, 2009). The underlying concern that prompted for this review was that learners are isolated in the conventional learning system which is based on face-to-face learning classroom therefore the incorporation of the emerging technologies widens the opportunities for instructor to reach students at any location (Beldarrian, 2006; Brownson, 2009). It becomes important to rview the possibilities arising from the use of online social networking sites (SNSs) to currently incorporated instructional system not only to increase social cohesion in the class but to cover a wider learning environment restricted by geographical location. Instructors can then incorporate learning content, classroom discussion, learners groups to improve learning interaction (Wang & Hsu, 2008). The establishment of online classes via social networking sites such as Facebook and Twitter has shown to encourage learners to build content mastery skill (Beldarrain, 2006; Pata, 2009).

This is because social presence in online learning is indirect unlike the conventional face-to-face learning environment (Dupin-Bryant, 2004; Garrison, Cleveland-Innes & Fung, 2004; Hill, Raven, & Han, 2002; Hill, Wiley, Nelson, & Han, 2004; Laffey, Lin, & Lin, 2006; Levy, 2007; Morris, Wu, & Finnegan, 2005). Quality social interaction from social networking is very important aspect of learning environments required to build a strong sense of community that connects to every online learners (Dawson, 2008). To establish an interactive community networks via online for learning requires a shift in the roles and processes of conventional instructional system to incorporate a more interactive social networking system that is versatile and efficient (Irlbeck et al., 2006; Drexler et al., 2010)

1.1 Issues

Rapid changes in use of technology prompts for a shift on how people communicate, collaborate, and learn using online social networks (Miller, 2009). Traditional instructional system has been use as foundational to course development but does not support sufficient interaction between instructors and learners (Dittmar, 2009). Using Facebook and Twitter for online class increased the level of interaction and student satisfaction because learners are given the opportunity to construct knowledge by interacting with other users and course content to complete learning tasks that complement their learning goals (Chen, 2007; Hoffman, 2008). Consequently, isolation and independence does support a kind of interaction required in building learning community that fosters exchange of knowledge and dissemination of information (Maor, 2003; Ludwing-Hardman & Dunlap, 2003; Valenta, Therriault, Dieter, & Mrtek, 2001). Thus, lack of spontaneity and media richness could impede meaningful interaction nevertheless; social isolation is a key challenge most institution struggles to overcome (Barbour & Plough, 2009).

1.2 Purpose of the Study

Evidences that technology have transformed learning environment abounds and communication and collaboration becomes effective using online social networks (Hewitt & Force, 2006; Boyd, 2007; Boyd & Ellison, 2008; Hoffman, 2008; Brownson, 2009). This study explores the use of social networking sites for online learning as a way to provide interactive learning environment to build stronger and more formal classroom setting. With social networking sites such as Facebook and Twitter as learning environments standout to reduce social isolation and increasing course completion (Hill, Wiley, Nelson, & Han, 2004; Woods & Ebersole, 2003). interaction increases the effectiveness of online learning and is an essential element to student learning. Online learning interactions could support relationships and increasing prevailing role of social media networking site interactions by supplementing existing real-world sense of community. This paper provides a shift in understanding the potential of online networked learning environments to communicate, socialize, collaborate and create knowledge-based community (Miller, 2009).

2. Technology

The incorporation of technology into learning system, enriches mode of interaction that supports learners to undertake online course that improves their overall learning experience (Rhode, 2009, p. 1). Suh et al., (2003) found that all communication are mediated using communication tools. Innovative tools and approaches for interaction has been integrated into a social networking site with the capabilities to initiate interactions beyond the course environment to different learner domains extending beyond virtual 'walls of the course" (Dalsgaard, 2006, p. 3). Technology-based instructional environment are compatible with varieties of technological systems such as multimedia, streaming audio and video, instant messaging well as web boarding electronic presentation (McGreal & Elliott 2004; more recent citations).

The relatively new technologies incorporating social media learning system represent future learning platform for online instruction and has transformed conventional face-to-face classroom learning environment to incorporate interactive technological features such as data channels, audio chat and voice over Internet protocol, handheld and wireless technologies that supports file and information sharing online (Princely, 2016). Technology has provided an efficient communication network to effectively create homelike learning atmosphere for learners to embrace a conducive learning environment (Edelstein & Edwards, 2002). Ravenscroft & McAlister (2006)

In designing online learning system, technological skills and experience is considered vital especially when interactive learning environment is a prerequisite to impact learners (Chen, 2013). To meet the growing need of learning, conventional learning system has found to be inadequate to fully meet organizational need and to equip learners with the knowledge brought about by technology.

Besides, there are significant challenges restricting traditional form of learning as institutions seek to extend learning outside school environment in such a ways to interact and communicate using internet mediated social networking sites tools (Chen, 2013; Princely, 2016).

Internet and computer technology extended learning hours, comfort and makes it easier to transfer learning content to area where traditional learning are limited (Oblinger, 2003; Princely, 2016).These innovation withness in learning environment has supported the implementation of online learning as an instructional technique which has shown to be critically needed to improve learning outcome (Clark, 1994; Kozma, 1994; Rhode, 2009). The relevance of technology to learning confined to the use of social networking site specifically Facebook to impact learners and transfer learning content with the aim to improve learners achievement (Matzat, 2010). Although technology is a sort after in different level of learning, use of computer represent a significant contribution to improve achievement, at less cost and time needed for instruction (Olufadi, 2016).

3. Social Networking Sites

The effectiveness of online social networking learning concept is centrally evidenced by its meaningful interaction that facilitates internet-based learning environments (Fosnot & Perry, 2005; Fosnot, 2005; Kord, 2008). The interactiveness functions to influence of online social networking and has continued to enhance educational experiences (Kord, 2008; Kord & Wolf-Wendel, 2009). Involvement in online social networking reduces time and increases social connectivity for online learners is critical create and maintain a successful online classroon (Bianco & Carr-Chellman, 2002; Kord, 2008).

Online social networks are popular among students especially Facebook, myspace.com, and xanga.com (Eberhardt, 2006, 2007). Social networking profiles incorporates responses to set generic questions for individual to disclose a number of personal information (Grigg & Johnson, 2006). In addition, contact information including name, e-mail, address and telephone number are used to categorizes individuals based on their interests such as in movies, music and hobbies (Junco et al., 2010).

Thus, online social networking provides access to users profile information to all the online friends. Thomas (2000) predicted that a positive influence of social networks have a big role to play in enhancing academic practices through social integration. The effects social structure in social integration from a social network perspective has shown that ties outside peer group supports learners to perform better academically (Kord 2008; Olufadi, 2016). Learning through social networking sites is relatively new concept however; the use of technology has become a popular means to stay connected with friends, meet new acquaintances and to express themselves (Kord 2008). However, the amount of time spend on online social networking could poss significant challenge to their use as learning because, learners can be distracted by their activities and wall post of their online friends. Therefore the relationship between students' involvement in online social networking and their integration could allow higher education professionals to clearly understand how online social networking influences learning experiences (Widemark, 2008).

However, online instructor designs learning scope, structure and function of various online course based on the available tools in a learning system (Dunlap & Lowenthal, 2009). Therefore learning system in use determines the extent at which learning can be conducted online (Morgan, 2003). Most often, online learning system are flexible enough to accommodate future development using tools that can increase social presence (such as asynchronous discussions, synchronous chat features) for those with access to the learning sites (Dunlap & Lowenthal, 2009). Online social networking sites enable learners to connect with other users between 1 to 5 hours each week (Higher Education Research Institute (HERI), 2007). Making social networking site such as Facebook which is the most widely adopted social networking site as a learning platform standout to enhance interaction and sharing of information via online (HERI, 2007, p. 2; Junco & Heiberger, 2009; Junco, 2010).

4. Social Networking Site for Learning

Social networking sites provides individual and groups medium to maintain and strengthen social ties in social and academic settings (Cain, 2008). Evidence suggests that interaction using Facebook between students and faculty members opens the opportunity for more intimate communication better than classroom interaction (Ellison, Steinfield, & Lampe, 2007). However, students use Facebook frequently than academic staff (Hewitt & Forte, 2006). The interaction in online courses using social networking sites such as Facebook and Twitter tends to interactive and learners prefers using them as instructional medium and to deliver learning content.

The social networking site extends learners connections and increase interactions leading to greater use of technology for online learners (Kerawalla, Minocha, Kirkup, & Conole, 2006). The interaction between learner and other learner, learner and instructor, learning content, learning interface, self interaction in selecting online courses enhances communication gaps and improves interaction during learning. This view was supported by Vygotsky's theory that asserted that interaction facilitate learner satisfaction through online interactions. This study clarifies that social networking sites such as Facebook and Twitter are viable learning medium to improve learners interactions and experience.

4.1 Facebook

Facebook, the most popular online social networking sites used by students (Eberhardt, 2007) was created in 2004 by Harvard student Mark Zuckerberg as a social network for students. Facebook members creates a personalized profiles information, invite online friends, collaborate through email and socially interact to share information with other members. This is possible because Facebook is a synthesis of most widely used Internet-based communication tools that is designed to supports instant messages and asynchronous chats, personal posts, picture uploading, group formation, event hosting Web development tools, dynamic searches, RSS feeds such as news feeds and blogs, mass and individual messaging, and e-mail as well as for networking and to establish online friendship at a click (Eberhardt, 2007; Junco & Heiberger, 2009; Quaas-Berryman, 2010).

Facebook enables students to maintain existing relationship and restore past relationships and learn acquaintances regarding to personal information such as recent activities, interests, movies, books and quotes. The use of Facebook as a learning classroom has received little attention (National School Boards Association, 2007; more rent citations). Because Facebook is already into students' daily practices, more salient classroom discussions can be established using digital literacy skills (Ellison, Steinfield, & Lampe, 2007). According to Olufadi (2016), Facebook uniquely creates connections between learners and instructors to connect with other online academic community.

4.1.1 A shift from social interaction to learning network

Initially, Facebook was used for social interactions and later extended to forming groups for academic purposes especially among peers (Cloete, Villiers, & Roodt, 2009). Study found that 66.6% of the students in Midwestern university were satisfied with Facebook as a learning platform (Hewitt & Forte, 2006). Another study by Nikos and Catherine, (2016) found that Facebook accounts can be used to predict students decisions. Among the information disclosed online include personal pictures, messages from friends and family members and opinions on certain courses and topics (Miguel, J. Caballe, S. and Prieto, J. (2013).

Jennifer et al., (2016) found that students are always fell more comfortable and eager to interact with their instructors through Facebook. This could be because, they learn better. Based on a study conducted by Junco and Heiberger (2009; Nikos & Catherine, 2016), there are five different ways to increase the use of Facebook social networking site for learning, they are:

1. Help students and their mentors to connect and maintain relationship
2. Support learners to connect with other learners and with the academic staff
3. Encourage learners to connect to other educational group and engage in activities on campus
4. Reduce tiers with those who learn using the traditional face-to-face system
5. Support the implementation of pre-enrollment orientation to educate learners on the potentials of social networking site in transforming their future.

Facebook isenriched with desirable learning qualities for an effective educational practices in that it is incorporated with interactive features that supports peer feedback with the social context of university learning (Mason, 2006; Bugeja, 2006). The conversational qualities of Facebook depicts good model of collaborative learning that encourages an active participatory role of learners (Jennifer et al., 2016). These qualities can enable learners to learn from informal communication and interact with other learners and exchanges social networks (Smith & Peterson, 2007).

4.2 Twitter

Twitter was developed in San Francisco, first launched in October 2006 and was used provides a social networking and micro blogging service platform for users to interact (Hansson, 2003). Twitter enables sharing of brief information upto 140 characters (Giustini & Wright, 2009) and represents is a multiplatform for social networking and micro blogging that is freely accessible online (Stevens, 2008).

The suitable of using Twitter as a learning platform stemmed from its collaborative technology that has drawn interest of users from different domains extending to education, economic and political sphere. The wall posts on Twitter can be edited and accessed online and sent as short message service (SMS), e-mail, or instant messaging. Micro-blogging with Twitter supports interaction between users using different technological applications to contribute to micro sharing environment (Drapeau, 2009). Communication and sharing of information confines to people a users choose to follow (Drapeau, 2009; Thompson, 2007) because Twitter connect people of like interests (Lucky, 2009). Because communication is in real-time, exchange of information is instant (Parry, 2008a; Young, 2008). As a alternative platform, Twitter immediately provides additional way to enhance connectivity among learners (Dunlap & Lowenthal, 2009) because twittering is used for blogging and instant messaging. Thus, educational content requiring urgency fit well with Twittering with the purpose to increase the speed and flow of information (Huberman, Romero, & Wu, 2009). Twitter is compatible with handhelds and mobiles devices such as iPhone and BlackBerry that promote information access and communication (Webb, 2007).

Using Twitter as learning tool represents a means to connect to numerous channels of chat using a single point of entry (Skiba, 2007). Thus learning will bw more accessible through desktop computer or mobile devices connected to the internet (Guistini, & Wright, 2009). Because Twitter is accessible over the Internet, learning content are not tied to specific computer location thus; conversations can be carried on from anywhere and questions can be responded to as intant message (Guistini & Wright, 2009).

4.2.1 A shift from interaction to learning platform

Social networking as a tool for collaboration and micro blogging have shifted to incorporate learning content. Twitter represent a powerful spaces for sharing useful educational information and sharing knowledge. School teachers are using micro blogging as an effective mechanism for getting updates from students, for public announcements and also for news from BBC, CNN, and CBC (Guistini & Wright, 2009). Learning environment widens with the incorporation Twitter by increasing the social and navigate to different locations to engage in discussion, collaboration, and sharing, the communication to include day-to-day and minute-to-minute experience (Suthers et al., 2008;). Schroeder (2009), refer to Twitter as a social service mainly for networks of friends, family members, and coworkers to integract and exchange view and frequently respond to questions. Twitter has shown to be a potential learning visual platform that supports community of like-minded members to post and contribute conveniently to resolving other users doubt through sharing of experience over a community controlled sharing environment (Drapeau, 2009). Parry (2008a) found that Twitter is an effective tool because of its ability to coordinated activities outside classroom environment. Deductions that can be eextracted from Parry (2008b) views on the usefulness of Twitter as a learning platform include:

1. Establishment of a continued class discussions
2. A stress-free way to address questions and resolve doubts
3. Platform for extended discussion on classroom activities
4. A reminder to classroom coursework
5. A reminder to campus events
6. Provides platform for students to connect and share knowledge
7. Vital in organizing timely learning projects
8. Effective in organizing groups study

Based on a study by Dunlap and Lowenthal (2009), the following deduction explain diferent experience of students using Twitter:

1. Student use online materials for classwork
2. Student assignments are done faster
3. Student sends out private tweet on any important news
4. Student use video, updates other about their hearing, posting comments and watch political debate.
5. Student tweets on every issue they consider important about their learning environment.

5. Learning and Interactivity

Positive relationship between technological learning tools and student interactivity in online courses improves the level of their discussions and queries (Bannan-Ritland, 2002; Batchelder, 2010). Interactive learning feature in online technologies continue to transform newer technologies into online learning platform through the enhancement of communication features that amount to a shift in collaboration (Li, 2003; Miller, 2009).

The incorporation of new technological features in social networking sites for instruction is of value in improving learning performance.

Boyd (2007) found that technology is central to communication, collaboration, and in socializing with others and in developing a sense of community which are important attributes that explain unique learning tools. Continued shift in the learning features of online social networking represent a transformation standard in making learning and sharing of knowledge easier and learning more convenient (Miller, 2009). A study by Robertson (2002) assserted that interaction as fundamental to learning cognitively and in contributing to an improved outcomes within the educational context. Thus, it can be deduced that interaction possess four main attributes capable enhancing online learning:

1. Interaction involve an event
2. The event are reciprocal
3. Engages participants in a conscious cognitive activity.
4. Contributes towards improving learning outcomes.

Therefore, the use of social networking site standout to improve interaction leading to promoting active learning that facilitates learning process and development of higher order knowledge and capabilities. This is because interaction in online social networking system is practically-oriented to transform learners' perspectives. Therefore through consist reciprocal actions of online users are intellectually stimulated to curiosly engage in productive instructional activities that directly influence their learning. Interaction online social network provides allow students to participate individually considering their preferences. Based on Bannan-Ritland (2002) study, it can be deduced that:

1. Learners' actively involve in online activity to fulfill specific goals through interaction either by sharing information or exchange ideas through socializing with others.
2. Instructional activities and feedback encourages communication among learners.
4. Interaction using social networking sites could be translated as social interchange of brainstorming from building consensus learners.
5. Instructional activities represent mechanisms to support student participation in the learning environment.

5.1 Types of Interactions

There is a gap in a learning environment between instructors and learners. The only possible medium to bridge this gap is to interact physically or using the online medium such as social networking sites. Different levels of interaction between an instructor and student using online learning environment undergoes a transformative shift to matches acclimates to the online learning environment. The essence of adapting a favorable online learning environment is to address the needs of the students (Conrad & Donaldson, 2004). Collaborative acquisition of the knowledge an interactive learning atmosphere to facilitate learning is a key to a successful online learning environment. The establishment of a comfortable atmosphere for learning is essential because, the cycle of collaboration within the learning community relies on interactive learning environment to achieve a successful outcome (Restauri, 2006). Interaction in online learning system has been extended to incorporate different elements surmised under instructor interaction with learner and the learning content. These elements are supportive to interaction that facilitates learning and can be deduced from a study by Moore (2005) and this study, referred to as elements of a successful e-learning system as follows:

5.1.1 Learner-instructor interaction

Learner-instructor relationship is initiated to act as a source of knowledge and experience transfer and for motivation, guidance, and feedback.

Learner-instructor interaction occurs during when an instructor disseminate information or knowledge to a learner or group of learners. In this situation the instructor plays the role of an expert or teacher in facilitating the transfer of information and in guiding learners. This form of interaction between instructor and learner is essential and highly desirable to impact learners (Moore, 1989, 2005). Learner-instructor interaction is perceived as the most critical form of interaction for online learning (Monson, 2002).

5.1.2 Learner-learner interaction

Learner-learner relationship centers on the interaction between peers and serves as knowledge transfer source for motivation, guidance and for assessment.

Learner-learner interaction is effected learner and other learner/s or group/s without the presence of an instructor (Moore, 1989, p. 4). Collaborative instructional learning involving different group facilitate learner-learner interaction especially in online learning platform (Vrasidas & McIssac, 2000). This form of interaction among learners enables them to share ideas on issue within their knowledge, collaborate on different tasks to gain multiple perspectives which is of interest to encourage and support them to learn more.

5.1.3 Learner-content interaction

Learner-content depicts ways learners interactively use information for knowledge sharing.
Learner-content interaction depicts a process of intellectual interaction of learners with learning content with the intention to transform learner's understanding and perspective on a subject of interest to facilitate a cognitive structured learner's mind (Moore, 1989, p. 2). The emerging innovation of modern technologies incorporated into social media learning system have enabled content to be presented in different forms such as printed materials, text-based Web pages, and multimedia clips and can be read on computer screen or saved in storage device. Other forms of interaction such as learner-interface interaction (Hillman, Willis, & Gunawardena, 1994) and learner-self interaction incorporate cognitive process to enable learners to regulate and organize their learning content (Hirumi, 2002, 2006).

5.1.4 Learner-interface interaction

Learner-interface interaction is another form of interaction that occurs between learners and the communication media system during learning process. Hillman et al. (1994) found that this form of learning interaction poses the most challenge to the interaction within learning environment because most learners are established with traditional classroom learning system. Therefore to improve learner-interface interaction, every online learner is expected to acquire technological skills that are prerequisite to a specific design of online media learning interface (Harmon & Jones, 2000). This is because, learner-interface interaction is technologically based applications available in different forms and is regulated using sensory stimuli and delivered in a variety of ways and forms (Hillman, Willis, & Gunawardena, 1994).

5.1.5 Learner-self interaction

Learner-self interaction represents a form interaction that enables learner's to reflect on the learning content, learning process as well as new understanding (Soo & Bonk, 1998, p. 3). Furthermore, learner-self interaction shows the importance individual understanding in engaging with learning content. it therefore implies that the reflection and synthesizing of information is central and procedural to learner-self interaction. Besides the deduction of Moore's three types of interaction, classified in this paper, Sutton (2001) suggested that vicarious interaction enables non-active participants to gain knowledge by observing active participants.

5.1.6 Vicarious interaction

Vicarious interaction is effected when student actively observes the processes in direct interaction between students or between student and the instructor. Learning interaction in this way is not direct hence referred to as "vicarious" (Sutton, 2001, p. 227). The assumption in centered on the fact that learners learn while observing others interact. The main benefits of vicarious interaction are that it allows learners to willingly engage in an indirect interaction through observing. Learners acquire knowledge and gain skill to address their individual questions by simply observing others interact and communicate in online environment (Robertson, 2002). Thus, actively observing interaction during learning provides insight and the opportunity to enlighten others under the environment of the instructional process (Robertson, 2002, p. 227). These forms of interactions essentially support learning communities and foster sense of learner connectedness (Dabbagh, 2004) as in other forms of learning interaction. Interaction in online learning environment becomes possible with the development afforded by technology.

6. Online Learning Interaction

From the perspective interaction within learning environment, it is important that learners to construct knowledge internally. Instructional learning system determines the choice of delivery information or knowledge transfer with the learning community. Thus, learner characterizes the learning styles that are used in designing instructional online interaction (Song, 2006).

Hirumi (2002a) presented classified three design concept of online interaction to include:

Level I: Learner–Self Interactions to include self-regulated learning among learners and referred to it as cognitive and metacognitive oriented to internalize knowledge.

Level II: Learner-Human and Non-Human Interactions to include variety of interactive platforms existing between learner-human and non-human with the intention to enhance Level I and Level III learning interaction.

Level III: Learner-Instruction Interactions depicts interaction designed to meet learning objectives and is characterized by learning context and instructional strategies to stimulate reciprocal interaction beyond learner-self interaction (Hirumi, 2002a).

The three interrelated levels of learning interaction are considered crucial to enhance online learning system using social networking system. The interaction exhibited in learning plays vital roles that support knowledge dissemination indicating that online instructors are faced with paradigm shift on the instructional space in a virtual learning system (Easton, 2003).

6.1 Instructor's interaction

The interactive aspect of online learning environment is socially constructed to enhanced through learner-instructor-content interaction (Huang, Kuo, Lin, & Cheng, 2008; Neumann, 2009). Instructors are expected to be familiar with the course content and design and development relatively to students learning outcomes. In order to effectively use social media networking platform for learning, instructors are required understand the current learning technological approaches that facilitates interaction. Interaction with the instructor and learners has consistently shown to be a reliable predictor of learning outcomes of online learning system (Bernard et al., 2004). Therefore, instructional activities can be used to enhance online education and to promote interaction to accomplish desired learning goals.

This is essential because online learners are physically separated from their instructors therefore; instructors are expected to adopt strategies to promote social presence, feedback quality and to support meaningful conversations. This makes it important to predetermine a class-structure to promote interactions and independent learning skills (Muirhead, 2004). Different types of interaction contribute towards the enhancement of learning outcomes (Hirumi, 2002) and satisfaction needed to foster learning. Interactive learning environment afforded by technology led to a shift in the role online instructor's and their intellectual competencies of computer knowledge (Robertson, 2002; Song, 2006).

Since instructors are seen as key factors to the success of online discussion and interaction in the learning environment, they are required to use instructional materials to gain knowledge of emerging innovative techniques and to adjust their coordinating roles (Song, 2006). Stein et al. (2005) found that instructor-initiated interaction could be used as a form of guidance and encouragement to online learning. In online classroom, interaction is initiated in the form of discussions (Mandernach, Dailey-Hebert, & Donnelli-Sallee, 2007) however; discussions create a forum for higher order of interactions leading to a thoughtful reasoning and dissemination of knowledge (Battalio, 2007). It becomes evident that interaction is central to learning satisfaction thus; increased interaction between instructors and learners in online environment is importance component of social networking mediated learning platform (Bolliger & Martindale, 2004)

7. Sense of Community

Learning communities comprising instructor/s and learner/s utilizes social networking site as a learning quest for a new knowledge. Community of learners collectively shares knowledge using online social networking (Kord & Wolf-Wendel, 2009). Social interaction in online learning community plays an important role in making information available through a collaborative sharing of knowledge (Pentland, 2005). Sense of community is perceived to maintain interdependence and the feeling of unity that every learner constitutes part of largely dependable learning structure (Kord & Wolf-Wendel, 2009). Therefore, socialization among members enables individual to learn and respect others value and cultures through a computer-mediated networking site. However, interaction with instructors separated by physical distance can be connected using visual space (Bannan-Ritland, 2002; Moore, 1989; Northrup, 2002; Yacci, 2000). From the views of Kreijns, Kirschner, and Jochems (2003, p. 340) two factors that depicts drawback to social interaction in a learning community can be deduced.

1 Social interaction is taking for granted.
2 High tendencies exist to confine social interaction to learning interventions with focus specially on developing cognitive processes.

These two drawbacks can be resolved through collaborative learning using interactive social networking site making teachers role of teachers as central to social presence (Kreijns, Kirschner, & Jochems, 2003). This is necessary so as to create an environment that supports timely learning, collaboration, engagement, and community building via social networking site. There are seven ways to facilitate learning in online learning communities. Ludwig-Hardman (2003) identified these learning features as community building block that need to be incorporated into measuring sense of online learning community which are deduced in this study to include:

1. To create a sense of shared goals to connect students to develop a greater desire to involve in learning activities.
2. To create safe motivated and supportive learning environment to foster unity and establish trust and respect especially among learners.
3. To develop an identity that ensures that participants in the learning community differs in their way of conduct and learning pertain compare with similar learning structure through the enforcement of group identity.
4. Motivation to collaborate and learn in online learning communities provides members with the opportunity to learn from others and also impact others with knowledge and skills.
5. Purposeful sharing of values seeks to establish diversity of membership knowledge as well as their opinions and perspectives in a form of authentic expression.
6. The formulation of an experessive and progressive discourse towards the acquisition of knowledge building supports the development of an effective learning community.
7. Mutual appropriation according to their needs and to the current state of the zones of proximal development in which they are engaged.

Thus exercising greater focus on buiding knowledge through learners community network fundamentally speeds up knowledge sharing and enables learners to meet their goals (Ludwig-Hardman, 2003, p. 20).

There exist a relationship between interaction with social presence and learners as well as the performance of online classroom in delivering learning content consistently (Picciano & Dzuiban 2007). It has been indicated that establishment of an interactive learning community is essential component of an effective instructional design (Picciano, 2002, p. 33). However in this review, it has been shown that an interactive learning environment comprises learners, instructors and learning content interfaced learners connectedness in the form of involvement of human relationships in teaching and learning activities to provide insights into discussions relative to learning content (Shin, 2002, p. 133). This form of learning is shows sense of belongingness only observed through online social networking site.

There should be quick response to rescue students who experiences difficulty in reading and writing online or those that are not familiar with the technology in use for learning. This because learners having difficulty in communicating with others feels isolated in online environments (Neumann, 2009). Instructional design for academic tasks is therefore recommended to employed commonly use technological media such as Facebook and Twitter for visual online classroom in order to promote equal participation and interaction to collaborate and share a sense of learning community (Rovai, 2007; Neumann, 2009). Interactive and collaborative learning environment that is devoted to classroom activities promotes oneness and timely feedback to other learners (Brown, 2001).

The improvements in afforded by social media networking sites in providing effective communication platform and sharing of knowledge in a learning environment using email, chat room and conferencing, web discussion forums and other technologies that support frequent interaction (Walker, 2007). The growing learning opportunity incorporated into technology-based social networking sites makes learning possible at any location with internet connection.

8. Importance of Interactionin Learning Environment

Interaction in a learning environment has shown to be a significant component of online learning environment in order satisfy the needs that motivate for learning (Gunawardena & Duphorne, 2001; Hodge, Bossé, Foulconer, & Fewell, 2006; Swan, 2001). Prior studies has shown that students prefer to learn in an interactive to gain experiences (Christensen, Anakew, & Kessler, 2001), to enable them actively engage in communication and discussion forums (Monson, 2003; Su, Bonk, Magjuka, Liu, and Lee, 2005; Nikos & Catherine, 2016). Interaction is a critical learning factor that requires learner motivation, engagement and satisfaction to achieve the intended learning outcome (Su, 2006).

9. Conclusion

With increasing interest in collaborative learning and the use of computer-mediated networks, to establish appropriate learning environment, social media networking site represent a future pathway to enhance learning experience. Meaningful interaction via online learning system based on social networking sites represents an effective platform to enhance learning experience. Hence, learning interaction must be intentionally designed to communicate, share, and express learners view. Interaction is central to the competitiveness of social networking as a potential learning environment. Social interaction provides ways to engage the learner to communicate and sharing knowledge. Interaction enables learner to manage learning scope and sequence of the learning content, pace, and time exhausted on each learning tasks. Interaction has shown to be central to creativity and critical thinking that support new ideas through sharing of thoughts and perspectives. Although social networking site has shown to be an alternative learning environment technological skill and knowledge especially relative to computer are prerequisite for on learning. Among the factors that affect online interaction include size of the learning group, knowledge of other participants pertaining to the learning content and learner experience to clarity individual interaction level. Lack of interaction in online learning poses severe barrier to learning performance because meaningful interaction contributes to the learning outcomes in educational context. Interactive learning environment enables instructors to predetermine and organize suitable learning content for specific environment prior to administering instruction with the intention to improve learning experience.

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