A Conceptual Framework for Evaluating Attrition in Online Courses

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ABSTRACT

The purpose of this paper is to develop a conceptual framework that considers the role that the sense of isolation and alienation play in contributing to attrition in online courses in the higher education sector. The approach adopted in this paper is a theoretical study aimed at synthesizing existing theories. The ultimate contribution of this paper is to assist future research explore attrition in online courses as well as identify appropriate methods to engage and motivate students.

Keywords: online education; attrition; social presence; alienation; engagement; learning communities.

Introduction

Over the past two decades, political, technological and social change has altered the face of higher education throughout the Western world (Lake, 1999). Australian government initiatives have been driven by cuts in public funding as well as the neo-conservative belief that education is a private good for which the user should pay (Biggs & Tang, 2007). As a result, the nature of the university has changed to include a corporate outlook as they engage in activities to attract and retain students. To accommodate the need to boost student numbers many Australian universities have turned to online courses. The development of online courses has enabled students who previously may have been excluded from university because of geographic considerations, as well as time constraints, the possibility of studying (Lake, 1999). The commercialization of higher education is arguably a contributing factor to the growth and popularity in online learning. However, it is not the only factor. Students' expectations are changing and technology is viewed as integral to the learning experience for a new generation of learners (Nelson, 2002).

A study by Alexander and McKenzie (1998) indicated that little emphasis had been placed on demonstrating whether there was an improvement in the quality of the student's learning experience, despite claims that new technologies enhance the quality of learning. Research (cited by York, Yang & Dark, 2007) found that online courses1 which lack meaningful interaction and social presence, contributed to students reporting a sense of alienation, an unsatisfying learning experience and high attrition rates. Attrition rates have always been higher in online learning, in comparison to face to face (Carr, 2000) and according to Tinto (2006) despite many years of work; there has been very little change in student persistence rates in the last decade.

Tinto (1975; 1987) was one of the first to make connections between the academic and social systems of the institution and the individual who shaped those systems, linking these processes to student retention. The key notion of this model "was the concept of integration and the patterns of interaction between the student and other members of the institution" (Tinto, 2006, p.2). Whilst Tinto's seminal work focused on campus based (face to face) development of learning communities this paper applies his model to an online learning environment. This paper examines the online engagement needed to enhance student satisfaction and retention rates. The aim of this paper is to develop a framework from the literature that will assist in identifying how the learner becomes an interactive participant in the online learning community leading to greater learner satisfaction and retention.

Background

Feedback from students that had withdrawn from a fully online MBA program offered by a university in Australia raised awareness of the distinction between the requirements of online education as compared to the more traditional distance education. The exit surveys revealed that students had with\drawn for reasons that at the time were not always considered to be within the control of the university or the staff involved in delivering the MBA. Statements from students were for the most part vague or difficult to interpret and yet some now provide evidence that there were issues which now are explained by the literature. As exemplified by the following statements from students: *I felt shy about using the emails to ask other students for help. I thought studying online would be more flexible but I could not stay on top of the work load. I felt as if I didn't know anybody not even the lecturer. I found it to be*

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[1] In this paper the term course is used in place of unit or subject and does not infer a degree program.

a very lonely process. I missed the interaction with others that used to be part of my undergraduate degree. It seemed like a good idea at the time but I found it hard to communicate with people I didn't know.

Upon reflection the approach to the MBA to commence was far from what would be considered fully online in today's environment. The learning management system was rudimentary and as a result the students were sent books, materials and even CD's to supplement the course requirements. This of course changed with the introduction of an improved learning management system (WebCT) and audio recording of lectures and commentary as well as a designated help desk phone contact point. The high attrition rate lead to the decision to abandon the commitment to offering a fully online MBA and replacing it with a face to face campus program. However, with the advent of new technology and advancements in learning management systems (in particular Blackboard) there is a resurgence in offering the online program.

Contributing to this new found commitment to online offerings is the emergence of the massive online open courses or MOOCs which has caught the imagination of the hierarchy in universities as a way to gain more students and income. Whether this will replace or even supplement traditional fee based university courses is unclear and is a point of contention. The attrition rates of MOOCs is reportedly high with MIT and Coursera being as high as 95% (Daniel, 2012). This staggering rate of attrition is grounds for concern rather than optimism and certainly a clear indicator that a framework for better understanding the causes of attrition in online programs is necessary.

Literature Review

Educational rationale

The higher education sector has recognized the importance of including online course support and even entire online courses as an opportunity to enhance student learning outcomes (Mc Alpine & Allen, 2007). Online teaching has two main advantages over face to face delivery; firstly, enabling students to spend more time on the task; secondly, providing more opportunities for collaborative interaction, both of which have been correlated with higher student achievement (Mazoue, 1999). Consequently, teachers are seeking to facilitate the intense participation and engagement that students can experience in an online environment (Palloff & Pratt, 2005a). According to Dawson (2006, p. 153) contemporary teachers are embracing teaching pedagogies which emphasise "learning as a social and interactive activity". From this view, learning is presented as a social process that takes place through communication with others in communities (Tu & Corry, 2002). As a result of this change, there has been greater importance placed on using educational strategies that seek to develop the concept of an online learning community.

Technology

There has been an explosion in the use of online technologies and courses since the early pioneering days of the Open University in Britain reflecting how the global education market has responded to economic opportunities presented by the increased potential customers (Lake, 1999). The definition of online learning in this paper is "an open and distributed learning environment that uses pedagogical tools, enabled by Internet and Web-based technologies, to facilitate learning and knowledge building through meaningful action and interaction" (Dabbagh & Bannan-Ritland, 2005).

In Australia, the Bradley Review of Higher Education (2008,72) identified that new information and communication technologies (ICT) play a significant role in teaching and learning in universities, with most students reporting having used an ICT in some form. In the United States in 2007, according to the most recent study by the Sloan Consortium, there are approximately 3.94 million U.S. students enrolled in at least one online course, reflecting a jump of 12.9% over the previous year (Johnson, 2009). There are an increasing number of business schools offering courses as well as entire MBA programs online (Eastman & Swift, 2001). This trend is, in the first instance, being driven by technological advances, an increasing number of people with internet access and competitive pressure from external stakeholders (Arbaugh & Duray, 2002). In addition, there is a new generation of students who wish to set their own time, pace and place as to where learning will occur (Berge, 2002).

With this trend in mind, more research is needed into the ways learners respond to the online environments (McConnell, 2005). According to Boud and Prosser (2002) the introduction of online teaching has raised matters of concern. These authors identified that complacency has developed allowing the technology to drive the design and presentation of the teaching material, rather than pedagogical knowledge and theories of how students experience learning through the technologies. Concern has been raised that merely exposing students to technology does not guarantee community among learners nor learning to occur (Mazoue, 1999). Further, according to Tu & Corry (2002) most studies have simply incorporated the traditional learning community model to an online environment without considering how technology affects the way learning communities form and operate.

Attrition

There is a down side to the proliferation of online courses which comes in the form of attrition rates. Carr (2000) estimates the attrition to be 10% -20% higher for online courses than for traditional face to face classes. However, there is a range in the reported attrition rates between some institutions, some are as high as 70%-80% (Flood, 2002), while Diaz (2002) suggests attrition rates are between 20%-50% for online courses. What research tends to support is the statement by Parker (1999) that "with the growth of distance education has come the problem of exceedingly high attrition rates". The paradox facing universities is – that in accommodating the growing demand for online educational opportunities, they face the daunting task of dealing with a high attrition rate. This is an obvious concern for universities who are reliant on student numbers. According to the Bradley Review of Education (2008) whilst Australia's attrition rate was better than average, it was suggested that it was worth improving student satisfaction.

The high drop out rates have been attributed to the physical separation, reducing the sense of community, giving rise to feelings of alienation (Rovai & Whiting, 2005), isolation and lack of personal attention (Rovai, 2002). Tinto (1993) emphasizes the importance of community in reducing attrition suggesting students will persist in courses if they feel involved with other students and develop relationships with members of the learning community. Wegerif (1998) suggests that students feel more motivated, involved and satisfied when they perceive they belong to, and are part of, the learning environment.

Conceptual Framework

Research (Kreijns, Kirschner& Jochems, 2003) suggests that teachers and course designers take for granted that social interaction will automatically take place just because an environment makes it technologically possible. They also identify, that regrettably, there is a tendency to restrict social interaction to educational interventions aimed at task functions while ignoring the social (psychological)

interventions aimed at socio-emotional processes. The framework in this paper posits that a significant level of social presence is required to support interaction and establishment of relationships between students so that learning communities maybe developed and maintained. The premise being that the development of social (psychological) relationships in the initial stages of a course, in the form of a socialization period, as indicated in Figure 1, contributes to the development of online learning communities which enhance student retention and satisfaction.

Figure 1:
Proposed Conceptual Framework

Orienation & Socialisation Period → **Social Interaction & Presence** → **Learning Communities** → **Increased Student Retention & Satisfaction**

Constructivist learning and interaction

This framework is influenced by the social constructivist perspective in which learning is viewed as a social and cognitive process. The constructivist paradigm holds that learners are actively involved in the construction of knowledge and emphasizes joint construction of knowledge; joint negotiation of alternatives through argumentation, debate and other means; and, student reliance on other students and teachers as learning resources (Spector, 1999). These perspectives support the theory that learning is a social process and this is consistent with the notion of online learning used in this paper. Drawing on the work of Vygotsky (1986, cited by Berge, 2002) it has been argued that a great deal of learning takes place in a social context which is driven by interactions with others which may consist of pairs of students, peer groups and the teacher.

In this context interaction is considered necessary for the formation of knowledge and the development of collaborative learning experiences, which are critical aspects of learning in a social constructivist perspective (Bird, 2007). Interaction is a pivotal component of collaborative learning, where to a large extent, knowledge is socially constructed, created actively and evaluated communally (Wheatley, cited by Duncan, 2005). Interaction provides opportunities for developing social and communication skills, positive attitudes towards co-members and the learning material, building social relationships and cohesion (Johnson & Johnson, 1999). Interaction therefore consists of learning and social elements, which are strongly related and evolve over time (Oren, Mioduser & Nachmia, 2002).

Learning Community

The constructivist learning paradigm emphasizes the importance of the teachers and students forming learning communities to achieve collaboration and shared learning goals (Angelo, 2000). A learning community is defined "as a common place where people learn to define problems affecting them, to decide upon solutions, and to act together to achieve these solutions" (Tu & Corry, 2002, p. 207). The importance of learning communities in higher education is well documented (McConnell, 2005). Tinto (2000) identified a twenty five percent higher retention rate of first year students who participated in learning communities, as opposed to those students who were not involved in a learning community. In this study, learning communities were those students who shared knowledge, in the form of the same curriculum over the semester; shared knowing, by constructing knowledge together; and shared responsibility; by

participating in collaborative groups. These students also reported a higher commitment to their own learning as well as that of others. Whilst this research involved students attending face to face classes it does provide confirmation of the potential benefit both for the learner and the institution. This is notion is supported by Conrad (2002) who identified that a creation of a learning community leads to learner sense of satisfaction as well as increased rates of course completion.

The use of learning communities can be considered an effective strategy to address the student attrition and satisfaction while presenting an effective approach to learning (Dawson, 2006). This increases the need to better understand the social nature of learning, effectively how and why people connect with each other (Cohen & Prusak, 2001) especially in an online environment. According to research citied by Conaway, Easton & Schmidt (2005) online teaching can offer unique social learning opportunities that engage students. However, Cutler (1996, p. 320) concluded that the current online literature is limited as it "is almost entirely task based…. with little attention given either to the changes effected on the people or to the social relations created from using the communication technologies". Research (cited by McConnell, 2005, p. 26) has found "technology is leading change at a fast pace, with the result that there is too little attention to exploring the new forms of pedagogy made possible by e-learning". McConnell goes on to note that more research into the ways in which learners work in online environments is needed. Others (Tu & Corry, 2002) suggest that the research has failed to or has ignored the importance of the development of the learner in the formation of an online learning community. According to Wergerif (1998) there is a social dynamic that underlies learning, particularly the mechanisms through which students succeed, or fail to succeed, in moving from being legitimate peripheral participants to becoming more central members of a community. The importance of the social dynamic is consistent with framework and aims of this paper.

Alienation and Engagement

Numerous authors (cited by Dawson, 2006) have identified the importance of communication in the development of a sense of community in an online environment. Yet, students are isolated while engaging in what is inherently a very human process of learning by interacting with dehumanizing machinery (Dykman & Davis, 2008).Research (cited by Rovai & Whiting, 2005) has suggested that students in an online learning environment may be more likely to experience isolation and alienation from the institution because of their physical separation from the school, services and from other students. Geyer (2001, p. 390) defines alienation as ''a subjectively undesirable separation from something outside oneself… or even inside oneself''. Whilst, Schabracq and Cooper (2003, p. 54) refer to a ''disturbance in a relationship''.

Tinto (1975; 1987; 1997) created a model that explained student attrition as being related to both academic and social integration. Significantly, Tinto identified that student attention is initially focused on establishing social relationships with their peers and their academic involvement is therefore played out against the broader backdrop of concerns over social membership. According to Tinto (2000) students do best in settings where expectations are clear and consistent; and when they are socially involved. During initial orientation activities Universities undertake the process of setting expectations with students which help to establish academic expectations as well as assist with the social integration of the new student. The notion of orientation programs at University are not new, and play a pivotal role in the students' transitions from high school or work into higher education. A key component of these programs is to help the student make connections to the institution as well as to social support networks (Braxton, Hirschy, & McClendon, 2004). By adopting the principles of orientation and socialisation at the course level, the induction of students into the online learning environment can be improved.

The lack of face to face interaction in an online course can be a potential barrier preventing students from forming social networks as well as learning communities (Motteram & Forrester, 2005). Kreijns, Kirshner, Jochems and Van Burren (2004) identified contemporary online environments as predominately functional and guided by pure educational restraints without attention given to the social (psychological) aspects of developing online interaction. As a means of combating feelings of alienation, Palloff and Pratt (1999) found that it was essential to establish a strong sense of community among online students and promote communication between the learning community. In order to develop a sense of community, it is crucial that the learner is made to feel part of an environment where his or her contributions add to a common knowledge pool and where a community spirit is fostered through social interactions albeit facilitated by a skilled instructor (Rovai & Whiting, 2005). Social interaction in this context not only relates to educational processes, but also to processes that have to do with getting to know each other, committing to social relationships, developing trust and belonging, and building a sense of on line community (Kirchner & Krejins, 2005).

Social Presence

Whether students perceive the CMC environment as having social and human qualities depends on the social presence created by the teacher and the online community. Social presence refers to the properties of a medium that influence social cues and as a result, interaction (Short, Williams & Christie, 1976). Garrison, Anderson and Archer (2000, p.4) define social presence as "the ability of participants in a community to project themselves socially and emotionally". Tu (2000, p. 28) links social learning theory and social presence theory stating, "The amount of social presence is the degree to which a user feels access to the intelligence, intentions, and sensory impression of another." Social presence appears to be vital to collaboration and is a precursor to cognitive presence which develops when learners rise above their desire to be sociable and supportive (Clouder, Dalley, Hargreaves, Parkes, Sellars & Toms, 2006).

While online learning technology may provide the infra-structure for learning communities, it paradoxically both separates people and connects them (Duncan, 2005). Willis (1993) has suggested that high levels of student attrition in online courses can be attributed to a lack of 'perceived' social presence and interaction which contribute to feelings of alienation and unsatisfying learning experiences. The development of social presence is the key to developing a social climate in which students feel as if they belong within the learning environment, contributing to the students' motivation, involvement and satisfaction (Wegerif, 1998).This is consistent with the view advocated by Boud & Prosser (2002), that it is not how well academics design and implement the new technologies, but rather how students perceive and experience their learning environment, that is responsible for attrition. Tinto (2006) found a link between learner engagement and retention, identifying a gap between the research and practice as to how to make this happen in different settings.

Discussion

Learning Communities

Learning communities are groups of people who support one another with regard to meeting their learning agendas, work together on projects, learn from one another as well as from their environment, and engage in collective socio-cultural experience in which their participation is transformed into a new experience or learning (Dabbagh & Bannan-Ritland, 2005). Forming learning communities helps to integrate students by instilling a feeling or perception that they belong to the program and are part of the student body within the wider university, which arguably facilitates successful retention within the course (Motteram & Forrester, 2005). Whilst the term learning communities

may be a loosely defined term that encompasses any social network or infrastructure which brings people together to share knowledge the process is much more profound than merely appreciating another (Tu & Corry, 2002).

According to Walther (2009) when an individual communicates online, even didactically, it is done as a member of some group. For the purpose of this paper, a group is defined as a collection of individuals who are interdependent in some way, who interact with each other, and who may be trying to satisfy some personal need through their joint association (Johnson & Johnson, 1997). Learning communities may be described as involving the formation of a specific type of group which has the potential to relate in a collaborative online environment, using the notion of 'reciprocal altruism'. This is consistent with the development of co-operative relationships within groups where an individual may help someone, in that group, with an expectation that the action will be reciprocated in the future (Spoor & Kelly, 2004).

However, in the initial stages of an online course learners are only an aggregation of individuals sharing a common setting. Something must happen for them to feel they are a cohesive unit (Tuckman, 1965). Research (Oren, Mioduser& Nachmias, 2002, p.11) has explored how social interaction can develop with an online environment, considered by many to be a "cold medium". That is, users of an online environment find it difficult to convey feelings and emotions through the use of language and are often misunderstood. Further, not all messages are perceived and interpreted as stimulating (Tu, 2005). There are concerns regarding the facelessness that occurs despite the fact that students names appear next to their contributions, making processes appear depersonalized and causing anxiety for some students (Reid, 2003). For those students who are unfamiliar with discussion forums and bulletin boards, communication in the form of text with unknown others can be intimidating, with some students being afraid they will embarrass themselves with postings that are not clever, educated or interesting to others (Tyler-Smith, 2006).

Online interaction may be more aggressive and hostile in verbal exchanges as well as more difficult to resolve conflicts (Short et al. 1976). According to Lee (2005) flaming is a widely recognized phenomenon of online interaction and occurs in an online environment when users focus on the composition of and response to verbal messages, rather than the audience. Flaming consists of the hostile expression of strong emotions such as swearing, insults, and name calling. According to Rovai (2002) factors such as negative communication patterns, fear of criticism and retaliation, reluctance to give ones feedback can adversely affect a sense of community by reducing feelings of safety and trust among the participants. Further, the physical separation of students in online course contributes to a reduced sense of community which leads to feelings of disconnection which leads to higher attrition.

In addition, other variables (e.g. group size and composition, nature of task, learning styles) have been identified as factors that may potentially influence the effectiveness of collaborative learning, however all these factors are moderated by one single key element, social interaction (Kreijns, Kirschner, & Jochems, 2002). The effectiveness of learning in asynchronous exchanges depends on the social interaction that takes place among participants, "indicating the establishment of a community of learning" (Kreijns, et. al., 2002, p. 156).

Social Interaction and Presence

The critical aspect of forming and establishment of a learning community is the development of social presence (Dawson, 2006) as when the online environment lacks social presence, the "participants see it as impersonal and, in turn, the amount of information shared with others decreases" (Leh, 2001 cited by Aragon, 2003, p. 60). Leh (2001, cited by York, Yang & Dark, 2007) identified lack of physical and face to face

contact in online learning environments as leading to a sense of isolation, or lack of social presence.

Social presence creates a learning environment that is perceived as warm, collegial and approachable, by making group interactions appealing, engaging and intrinsically rewarding (Rourke, Anderson, Garrison & Archer, 1999) as well as being a strong predictor of satisfaction with online learning (Aragon, 2003). Social presence theory has two aspects, immediacy and intimacy. Immediacy being the measure of the psychological distance that a communicator puts between themselves the object of their communication while intimacy is dependent on nonverbal factors which include physical distance, eye contact, and smiling (Gunawardena & Zittle, 1997). Immediacy behaviors include affective, cohesive and interactive responses (Rourke, 2000). The immediacy behaviors are critical factors in the social role the teacher plays in "building a learning community" (Easton, 2003, p.90).

A common weakness of online course is the lack of appropriate and deep interactions (York, Yang & Dark, 2007). To increase the level of interaction, the degree of social presence must also be increased (Tu, 2005). According to Stacey & Rice (2002) the teacher must play an important role in providing time and activities for establishing social presence to enable the online environment to foster closeness and psychological safety needed for collaboration. The teacher needs to actively employ a number of different techniques to increase interaction and social presence (Hutchins, 2003), modeling behaviors to help the students establish social presence (Salmon, 2000 cited by Stacey & Rice, 2002). According to Stacey (2002, p. 291) teachers can respond encouragingly to the students' introductory messages, quote in messages, as well as incorporate "affective behaviors" such as humour, emotion, repetitious punctuation, and self-disclosure. These behaviors were found to be quickly imitated by the students. Humor reduces social distance, conveys good will within the learning environment and is considered an invitation to start a conversation (Aragon, 2003). Other immediacy behaviors include, using first names in online postings, sharing personal stories and examples, responding quickly, and writing in a friendly tone. According to Salmon (2000) superficial social exchanges will lead to collaboration as group interactivity increases. As students collaborate they begin to formulate social codes and form social networks which play a key role in student retention (Fisher & Baird, 2005).

Alternatively, Tu & Corry (2003) posit that the teacher provides learning structures to guide learners throughout various learning experiences involving action social interaction by the use of technology. These authors suggest that if the online course is designed appropriately, social presence will naturally evolve from student's interactions and being aware of each other. However, according to Rovai (2002, p.8) just designing a course and putting it online, without the community being nurtured and support provided "in the form of heightened awareness of social presence" , will lead to the sense of community to fail. To the extent that both of these views have merit, the framework through the inclusion of a socialization period incorporates both teacher time and activities, as well as structures, to involve the learner.

Course Design

Social presence can be initiated in the design of an online course by the inclusion of welcome messages; student profiles; audio broadcasts; structured collaborative learning activities (Aragon, 2003). In terms of course design and learning materials, Tyler- Smith (2006) suggested teachers should start slow and build the course tempo. Initial learner-learner interactions are important for creating feelings of community (Palloff & Pratt, 1999), and should not be heavily laden with course content. This view is supported by Wergerif (1998) who also suggested that social activities take place at the beginning of the course and more learner-learner and learner-content activities take place as the course progresses.

Merely providing an online environment does not guarantee that interaction will develop; social presence is required to foster online interaction, and in turn social learning (Tu, 2000). If group members are initially not acquainted with each other and the group has zero-history there is a very high risk that learners will become alienated (Kirchner & Krejins, 2005). Limiting social interaction to the cognitive processes in learning, whilst ignoring the importance of developing social relationships, will negatively affect the formation and subsequent building of learning communities (Kreijns, Kirschner & Jochems, 2002). Rourke (2000) stated that "if students are to offer their tentative ideas to their peers, if they are to critique the ideas of their peers, and if they are to interpret others' critiques as valuable rather than personal affronts, certain conditions must exist. Students need to trust each other, feel a sense of warmth and belonging, and feel close to each other before they will engage willfully in collaboration and recognize the collaboration as a valuable experience".

To achieve this interaction, Fowler & Mayes (1999) posit that the learning environment should be designed around the learners' personal identification with others. Wegerif (1998, p.48) identifies that "forming a sense of community, where people feel they will be treated sympathetically by their fellows, seems to be a necessary first step for collaborative learning". This suggests there is a social dimension (e.g. becoming acquainted, committing to social relationships, developing trust and belonging, and building a type of community) that relates to the socio-emotional component of group forming and dynamics (Kreijns et. al. ,2002). This is consistent with research by Walther (1996) who found that greater actual work effort was observed not in task orientated groups but in groups that were the most socially orientated and suggests there may be a social facilitation phenomenon at play in this process.

Social interaction requires learners to get to know each other, commit to social relationships, develop trust and belonging, so they may build an online learning community (Kreijns et. al., 2003). Ultimately these social relationships will contribute to a process of affiliation, impression formation, and group cohesion which in turn affects the level of interaction (Kreijns et. al., 2002). These processes contribute to group cohesion which may be defined as member's inclinations to forge social bonds resulting in members sticking together, remaining united as well as contributing to improved interaction between group members (Carron, 1982). The formation of positive relationships contribute the maintenance of membership of the learning community, induces learner satisfaction as well as promotes interaction (Johnson & Johnson, 1997), leading to a higher rate of retention (Tinto, 2000). Research (cited by Dawson, 2006) has identified a significant relationship between increased levels of interaction and the sense of community experienced by the learner. This literature clearly supports the notion that a socialization stage encouraging learner interaction needs to occur in the initial stages of an online course. However, as identified by Salmon (1998, cited by Motteram & Forrester, 2005 p. 283) "Student induction…. Is both sorely neglected and yet a key aspect of success for teaching and learning online".

Orientation & Socialization

The first few weeks of a course are considered the most critical in terms of establishing a social presence (Lahaie, 2007). This initial period of socialization, focusing on building and establishing relationships, as well as trust, appears to be a key component of developing and maintaining a learning community (Swan & Richardson, 2003).This is the optimum time for the teacher to model and establish expected modes of interaction and should be used for orientation activities which can set the tone for socialization, an important aspect of building an online learning community (Bonk, Kiekley, Haza & Dennen, 2002). In the first month of an online course the learners are also interested and enthusiastic resulting in high levels of social dialogue (Gibbs, 1998).

Further support for the inclusion of an orientation period comes from Tuckmans (1965) cooperative learning group model, which argues that group development happens in stages, starting with the "forming stage". Tuckman's model identified a number of behaviours that emerge when individuals first come together; and suggests that the initial questions uppermost in the minds of students are concerned with establishing a sense of security and direction, getting orientated and becoming comfortable with the new situation. Some members are able to articulate their questions while at other times they just experience feelings of discomfort or disconnectedness. As a result, they seek some type of understanding and structure (Carlopio, Andrewartha, & Armstrong, 2001). The creation of social structure will assist with the development of structure and sociability required in the online learning environment (Kreijns et. al., 2004). Whilst Mc Innerney and Roberts (2004) identify giving students and educators time to familiarize themselves with the new learning environment before actual study begins is likely to be advantageous to all parties involved.

According to Rovai (2002) a sense of online community is supported in learning environments where there is an alignment of the teaching style and the learning stage. The first stage of Conrad and Donaldson's (2004) Phases of Engagement Framework also recommends the notion of a socialization or warm up period, with the instructor setting the initial tone of the course as identifying themselves as a 'guide'. They suggest in the first stage of this framework to include community building exercises to improve trust and help a group work together, as learners gain more confidence and develop relationships they are guided through additional phases of engagement. Social behaviour is considered a very natural human need and critical in the development of learning processes (Oren, Mioduser & Nachmias, 2002). Meyer (2002) identifies that learners in a traditional environment tend to greet each other as they enter the class room, or strike up conversations waiting for the class to begin. However in an online environment, informal conversations are more difficult to initiate as learners are missing the visual cues that indicate whether an individual is approachable. Social introductions therefore become the teachers' responsibility. The teacher should place a personal profile online, identifying their background, experience and expectations to help set the tone for the course (Dykman & Davis, 2008). Self disclosure, by the teacher, at this point helps to create a personal connection with the students and encourages reciprocity (Lahaie, 2007).

In this warm up period, the teacher should inform the students that others in the community are just as important, or even more so, than the teacher. This tone can be set by using an ice breaker as the first activity. An icebreaker should ask the students to provide some information about themselves, as well as a photo, that requires learners to learn about and interact with another in a non threatening manner (Clark-Ibǎńez & Scott, 2008). This supports the proposition by Cutler (1995, p. 326) that "the more one discloses personal information, the more others will reciprocate, and the more individuals know about each other, the more likely they are to establish trust, seek support, and thus find satisfaction". This is particularly important, as identified by Tinto (1975, p.107) "social interaction via friendship support is directly related to persistence in college". Sharing personal information, identity and values assists with the formation of learning communities (Palloff, 2003 cited by Fisher & Baird, 2005). To foster and maintain the feeling of community York, Yang and Dark (2007) suggest that the online course design include a page dedicated to a social space where students can paste their biographical sketches, place pictures and discuss any non task related topics allowing students to respond and interact with each other.

To encourage interaction, as well as elicit personal information, Conrad and Donaldson (2004, p.58) list and describe a number of online activities that are participant focused requiring learners to respond to each other. For example, a possible activity is 'Two Truths and a Lie'; whereby students post two truths about themselves and one lie, and other students then try to determine the lie. The fun element encourages the students

to participate, especially when the truths are so outrageous it hard to distinguish them from the lies (York, Yang & Dark, 2007). Activities, according to Salmon (2004, cited by Tyler-Smith, 2006) will promote the formation of an individual's identity online and also reduces early attrition.

In an online environment, the students' role of being an engaged learner evolves over time, as well as taking longer to develop (Walther, 1996), as result social activities need to be ongoing. This is considered necessary to address potential movement in the first few weeks of a course (late enrolments and withdrawals), having ongoing social activities are intended to engage the students in developing social bonds. In addition, allocating a permanent social forum, or space, will allow late comers to participate as well as catch up on their fellow learners' postings. This view is supported by Collinson et. al., (2000, cited by York, Yang & Dark, 2007, p. 43) identified that students need a space provided just for "social dialogue or simple chitchat".

Supporting learners till they are over the initial difficulties reduces the dropout rate in the early stages (Tyler-Smith, 2006). According to Palloff & Pratt (2005b) once students begin to participate they become accustomed to actively interacting with each other online and will take the responsibility for keeping it going. Fisher & Baird (2005) posit that with the formation of initial social bonds, students are able to elicit more support (academic and social) from their teacher and peers, which will emphasize collaboration and contributes to student retention. It is in this learning space students can find reassurance, build and maintain relationships as well as use each other as a resource (Motteram & Forrester, 2005).

The initial socialization period, has been directed and lead predominately by the teacher. However, as the students become more engaged they take on the responsibility of the social interaction. Members of a group move from a focus on developing social structure and roles before shifting to the course task requirements (Casey-Campbell & Martens, 2009). Oren, Mioduser& Nachmias (2002) identified more task related messages become evident as the course progresses, while the social components decrease becoming more explicit and personal.

Conclusion

This paper is concerned with addressing the sense of isolation and alienation that may occur for a large number of students who undertake online education, which the literature (Flood, 2002; Diaz, 2002; Carr, 2000) has identified as ultimately contributing to high levels of attrition. Student retention has become a matter of concern for Australian Universities reliant on maintaining student revenue as well as student satisfaction. Higher education institutions in today's market consider student satisfaction as one of the major principles in promoting the quality of their online programs (Yukselturk & Yildirim, 2008). The literature indicated that to increase retention (Tinto, 2007) and student satisfaction (Dawson, 2007) it is necessary to create social relationships which assist in the development of a strong sense of online community.

The framework presented in this paper provides a sound theoretical rationale for the inclusion of a socialization period in the design of an online course. The initial phase requires the inclusion of a socialization period that is incorporated both into the course design in affect this involves determining the amount of time and nature of the social activities. The second phase encompasses the teacher actively engaging in the development of social presence by modeling behaviour, conducting activities such as icebreakers, eliciting and providing personal information. The development of relationships that are formed in this phase allow an effective learning environment to evolve, which is an essential component of a learning community. This phase is predominately teacher led however as social presence builds the learners should more

readily assume the role of active participants, essentially forming a learning community. Once a learning community has been established, the benefits in terms of increased retention and satisfaction may be realized.

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