The personal experience of online learning: An interpretative phenomenological analysis

Student interaction is critical to online social cohesion and collaborative learning. However, online learners need to adjust to the computer mediated communication (CMC) medium of the online environment. This study explores online learners’ experiences of asynchronous text-based CMC using an interpretative phenomenological analysis of interviews with six online students. The analysis revealed that the constraints of written communication and lack of human interaction causes difficulties in adjusting and coping with the online learning environment. Four major themes were identified: the inability to express one’s self fully; difficulties establishing relationships; comparing one’s self to others and the written word as an ineffective learning medium. The study’s findings highlight a need for better student and tutor collaboration to facilitate a safe and interactive environment. Effective academic and social support can enhance online learning, improve student satisfaction and encourage students to persist with their learning.

Keywords: online learning, personal experience, Interpretative Phenomenological Analysis (IPA)

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**Introduction**

Advances in communication technology have lead to a surge in the number of individuals taking online courses. With the flexibility of online courses comes a greater responsibility for learners to be self-directed. Online learning, where computer technology communication (CMC) is used as the primary learning medium, differs to face-to-face learning environments in some fundamental ways. For students the experience of learning online, within an unfamiliar environment, demands personal adaptability and coping skills. Many students may enroll in online courses with without any guidance and may learn just enough about the online environment to complete the course- learning the new skills required is not an easy task (McGilvray, 2014).

Tutor moderated asynchronous discussion, which typically takes place via discussion board forums, is a main feature of online learning.Learners ‘sign on’ at times of their choosing using the computer as a ‘meeting place’. However, life in such a ‘written world’ gives rise to many unfamiliar problems. Written communication violates many deeply ingrained assumptions about communication, creating difficulties in establishing one’s own identity (Feenberg, 1989). Void of elements of speech such as intonation and non-verbal cues makes conveying how we feel and who we are problematic (Pennebaker et al, 2003). The issue of online student identity is not well recognized in the pedagogical literature, which until recently has focused mainly on aspects of instructional design (e.g. Sims, 2014), learning outcomes (e.g. Keramati, Afshari-Mofrad & Kamrani, 2011) and student satisfaction (e.g. Kuo, Walker, Schroder & Belland, 2014 ). However as Oztok, Lee and Brett (2012) note identities play an important role in online learning practices and a more refined understanding of identity is needed to address the relationship between the concept of identity and learning.

There has been an increasing trend for research to focus on the role of student interaction in relation to collaborative learning to establish a ‘community of inquiry’ for constructing, sharing and understanding of knowledge (Betts, 2009; Shea, Hayes, Uzuner-Smith, Gozza-Cohen, Vickers & Bidjerano, 2014). The need to provide shared learning spaces and tools for collaboration is well documented (e.g. Häkkinen & Hämäläinen, 2012). This body of work is underpinned by **c**onstructivist learning theory, which understands knowledge as constructed by learners through social interaction with others. As Shea (2006) notes, within online learning there has been a philosophical shift from objectivism to constructivism and a pedagogical shift from direct instruction to the facilitation of collaborative learning. It has been suggested that the online environment is an effective platform for promoting constructivist learning as it meets needs for students to access academic coursework at any time while enhancing communication skills (Schell & Janicki, 2013). However constructivism’s focus on group activities that facilitate collaborative learning via peer-peer interactions may present challenges for the online learning environment. Effective student interaction is critical to constructivist learning success as “effective and lasting learning takes place for the individual when engaged in social activity with a range of others” (Pritchard & Woolard, 2010, p.7).

Discussion forums aim to cultivate a social environment for student interaction, collaboration and exchange of ideas, establishing a ‘community of enquiry’, fostering a sense of belonging to reduce feelings of alienation associated with online learning (Rovai & Wighting, 2005). Participation in discussion forums serves a dual purpose – to enhance learning and provide support (Davies & Graff, 2005). Frequent student interaction has been associated with increased satisfaction (Gilbert, Morton & Rowley, 2007; Perez-Prado & Thirunarayanan, 2002). However, frequency of interaction as an outcome measure provides little insight into the experience of interacting and the importance of this for learning experience. As Gilbert, Morton and Rowley note, in-depth qualitative interviews may provide richer insights “and answers to ‘why’ and ‘how’ questions” (p. 571). There has also been criticism of over reliance on the instructional design, technological and cognitive aspects of learning with little attention to emotional aspects (McFadden, 2008, Montero & Suhonen, 2014; Zembylas, 2008). These approaches do not provide any detail of the particular nuances of any one individual’s experience so little is known about the role of students’ feelings, thoughts and experience in the process of their interaction and learning. It has been noted that failing to appreciate emotional aspects “can only offer an incomplete view of the learning experience” (Suero Montero & Suhonen, 2014, p. 165). A philosophical shift to focus on students as experts of their own experience is necessary. A phenomenological approach can illuminate this process to gain a deeper understanding of human interactions (Hignett & Wilson, 2004) and users’ needs (Bogner, 1996) in order to understand how individual learners experience their learning.

**Methodology**

***Data Collection***

The dataset comprises semi-structured interviews with six mature online students. Participants were aged between 29-52 years of age at different stages of their Master’s degree programme. A request for participants was emailed to all students on the same programme and participation was voluntary. Purposive homogenous sampling was employed to obtain a closely defined group for whom the experiential research question is significant. The interviews were conducted using Skype™ online telephony. Interviews lasted approximately 60 minutes. All names are pseudonyms.

***Analysis***

IPA provides a means of explicating how participants make sense of their personal and social world and the meanings that particular events and experiences hold for them (Smith & Osborn, 2008). Its philosophical underpinnings are within phenomenology, symbolic interactionism, hermeneutics and idiography (Smith, Flowers & Larkin, 2009). Developing from the work of Husserl, phenomenological psychology rejects the notion that one can construct an objective ‘truth’ about an experience, rather the focus is an individual’s personal perception or account. One cannot construct an objective third person account as there is something indispensable in first-person experience- “what it is like” for the individual to have such an experience (Summa & Giuffrida, 2013). As such, there is no attempt to construct an objective truth about an experience, rather individuals’ experiences, understandings, perceptions and accounts are honoured (Reid, Flowers & Larkin, 2005). IPA is concerned with the subjective account and meaning of an experience (Brocki & Wearden, 2006). This allows one to appreciate the perceptions and understandings of a particular group, rather than prematurely make more general claims (Smith & Osborn, 2008) which may lead to false assumptions and misunderstandings. Although IPA is an idiographic mode of inquiry the importance of theory is recognized. It is useful to judge IPA in terms of vertical, rather than horizontal generalizability. While horizontal generalizability aims to demonstrate that findings are applicable across settings, vertical generalizability is concerned with building interpretative theory. Findings should be judged in terms of their ability to enhance understanding and insight, to contribute to existing theory and to generate new hypotheses and research questions (Johnson, 1997).

The analytic process was as follows: (a) interview transcripts were read and reread a number of times to establish a general feeling of participants’ accounts; (b) exploratory comments were made and emergent themes were identified and organized (c) attention was focused on the themes to define them in detail and establish inter-relationships. (d) The themes were organized to make consistent and meaningful statements of the meaning and essence of the participants’ experience grounded in their own words (Smith et al, 2009).

**Results**

The overarching theme was difficulties experienced in relation to written communication in online learning. Participants struggled as they felt written communication was ‘not real’ and ‘unnatural’ and often felt vulnerable when ‘talking’ publically on discussion forums. The analysis shows some of their attempts to adjust to the online environment, but uncertainty and ambiguity pervades. Four major themes were identified: The inability to express one’s self fully; difficulties in establishing relationships; comparing one’s self to others and the written word as an ineffective learning medium. Each theme is intrinsically interwoven and pivotal to written communication. These themes are presented below, with illustrative extracts.

Inability to express yourself fully – ‘it’s not necessarily me at all’

The first theme encapsulates participants’ sense of loss of human interaction. The online environment, void of human senses meant that participants felt that interaction was dehumanized, unnatural and ‘not real’. As participants struggled to adjust, feelings of frustration and uncertainty prevented them interacting meaningfully. This meant they were often reluctant to communicate. Their accounts reveal their attempts to cope with these difficulties and strategies to overcome them.

‘all you have now is the way they write in the forum and the picture. So you may well have seen, if you’ve checked my introductory post on the forum, you’ll have seen my picture and you’ll have also have read the post and I think that comes across as rather hard, as a bit stiff – it’s not necessarily me at all, but that’s the way the picture looks and I tend to write a little directly I don’t – so again does that actually represent the way the people are?’ (Paul)

Paul, a novice online learner was shocked and disorientated as he felt robbed of the important aspects of face-to-face communication. His sense of bewilderment and frustration are apparent as he struggles to portray his own identity and understand others’. As he struggles to overcome his difficulties his sense of loss and hopelessness prevail as he is unable to recognize himself as ‘me’ and establish himself as a member of the student group.

‘ em it’s not human, not as human Yep? Because you’re missing out that face-to-face communication. I think with being face to face you’ve got the advantage of, you kind of, there’s more - when you’re face to face because you’re face to face there’s more interaction. It’s like a natural interaction and it’s there in abundance, whereas online you’ve got to force yourself to interact yeah? (John)

Other participants who were more experienced with the online communication also struggled to communicate effectively. John’s notion of face-to-face communication as natural and effortless contrasts with the unnatural and stark online environment where he has to ‘force’ himself to interact.

‘I pick up on people’s actual thoughts better when you get body language rather than in a text it doesn’t give you the feeling of the person’ (Janet)

Janet feels that written communication is not as sincere as face-to-face communication where the subtle aspects of communication give her an in-depth understanding of the person’s character not possible with written communication.

Not being able to naturally express one’s self negatively influenced participants’ interaction with others. Participants felt constrained and were concerned about causing offense, being misunderstood, which led to feelings of isolation and not belonging to the student community. These difficulties recur throughout the participants’ accounts as a barrier to establishing meaningful relationships.

Difficulty in establishing relationships - ‘you don’t really know, sometimes, who you’re talking to’

Participants’ accounts reveal importance placed on interacting with other students to provide a support network. Participants felt frustrated that some students did not reveal their ‘real’ identity. The lack of human interaction and sincerity associated with written communication meant that participants felt they were interacting with strangers.

‘One or two of the students have chosen just to use their own student number or a pseudonym, so you don’t really know, sometimes, who you’re talking to’. (Paul).

Paul was disappointed and frustrated that communication was ‘staid’ and ‘virtually non-existent’ and became more frustrated when other students held back and did not reveal their true identity. He was unable to ‘read’ them and saw their lack of openness as a barrier to establishing meaningful relationships.

Whilst the discussion forums aim to provide a ‘meeting place’ for student interaction some participants felt exposed ‘talking’ publically on the forum.

‘it’s kind of nerving, you have to get into it so to speak […] the fact that you are basically talking to a stranger, on air if you like through the airways […] In a funny sort of way it kind of feels unnatural because you’re not face to face, you can’t be face to face.’ (John).

John’s feelings of exposure could be equated with public speaking where the audience is often strangers, physically far removed and unresponsive. The notion of communication as unnatural persists as John’s reluctance to interact reveals his feelings of alienation in his reference to classmates as strangers. His narrative portrays his sense of frustration and loss as he is deprived of natural ways of communicating and struggles to cope with the impersonal online environment. Sarah also wants to establish herself as a member of the student community but is unable to identify with some people. She differentiates between different types of students.

‘the kind of hard core students that you see on the forum, you know what I mean, continually posting massive, massive posts and out shining the rest of us’ (Sarah)

Sarah does not want to identify with the very studious and capable ‘hard core’ group of students who she perceives as threatening and domineering. She instead identifies with more laid-back students like herself in order to establish her own identity and her place within the student community to gain a sense of belonging.

To overcome the difficulties with establishing relationships using written communication some participants sought other means of communicating- talking on the telephone and meeting at conferences or university open days. This allowed some participants to establish meaningful relationships in the ‘real world’.

‘He wasn’t just a pseudo name on the forum. I’d met him in person and knew who he was so I could just pick up the phone and talk to him.’ (Janet)

Janet values her relationship with this student- their relationship had been founded in the ‘real world’. Her real world is tangible and provides an environment where people are real, honest and open in contrast with the pseudo ‘course world’. Her meaningful relationship with him is her ‘mini-support network’ as they support each other at stressful times during their years as online students. In this way Janet could depend on him for support and could avoid interacting in the pseudo ‘course world.’

‘… and I did find, you know, that even just people saying that they’re struggling as well probably gives you an idea of where everybody else is at and maybe you’re not on your own struggling or something.’ (Fiona)

Fiona had not established any close relationships with other students but found other students’ self-disclosures on the forum a valuable source of comfort and reassurance. As a private person who felt she should be able to ‘get on with it’ she was reluctant to disclosure her difficulties in coping and appreciated and recognized other students’ courage in publicizing their own struggles. She found their admissions a relief- she was not the only one struggling which helped alleviate her own anxiety which helped her cope.

‘It puts you on an even keel and that’s sort of it’s in some ways is, I wouldn’t say comforting, but it’s good to know that you’re not just struggling yourself.’ (John).

John also had not established relationships with other students. He also found reading other students’ disclosures on the forum a source of relief. This process provided him with a readily available and accessible source of support and encouragement without the need to ‘force’ himself to interact while still being able to share in other students’ experiences. All participants expressed experiencing stressful times during their studies and conclusively used the forum as a source of encouragement and reassurance. However, student interaction varied and the depth and frequency was reflected in their different types of relationships with some students being more willing to self-disclose and express their struggles publically on the forum while others were more reluctant or chose to ‘lurk’ out of sight. Even though participants found the forum a source of support, a sense of not belonging to the student community prevails which is reflected in participants’ accounts as reference to fellow students as ‘they’, ‘people’ or ‘strangers’. Common struggles and shared experience with other students were a more frequent source of support than tutor support.

Participants relied primarily on their tutors for academic support but there is an underlying need for tutors to recognize participants’ psychological needs. Participants valued tutors’ input and feedback on discussion forums as a means of developing and formulating their ideas and framing their knowledge. ‘Having the tutors there have helped me formulate my ideas and sort of look at […] from a wider aspect.’ (Janet). However, participants were often unsure when and whether to approach their tutors for extra support. Most participants communicated privately by email with tutors when they needed extra guidance, but there was a general feeling of trepidation ‘because you don’t want to trouble anybody’. Participants sometimes felt they should be able to ‘get on with it’ by themselves.

Written communication had been a barrier to Sarah establishing meaningful relationships with tutors, but her feelings changed after a face-to-face meeting.

‘I think, having a face that I can place to the name and also knowing the personality […] and chatting and knowing that actually they are quite approachable. I feel that I can approach them about anything and they won’t judge me or think I’m stupid. But prior to that I probably was a bit – well I was - a lot more hesitant.’ (Sarah)

Sarah’s relationship with her tutors in the written world was based on mistrust and a misconception that they would judge her or think her ‘stupid’ if she asked for help. Her face-to-face meeting meant she could communicate in a way she was accustomed to. This allowed her to see her tutors as genuine and trustworthy people with whom she could establish a meaningful relationship. After this her feelings towards her tutors changed and she felt more confident and safer interacting with them. Fiona had a similar experience following telephone conversation with one of her tutors for the first time. In her narrative she reflects on a time when she was struggling to cope:

‘in the past when I was struggling a bit it would have been more useful to have a conversation and hear a voice erh, erh, that might have been a better way of dealing with it. I think you sort of have this impression that they’re you know, that maybe aren’t as human, but they obviously are.’ (Fiona)

Fiona needed her tutor’s comfort and reassurance at a time when she was having difficulties coping but was reluctant to disclose her feelings to them. Fiona’s perception of her tutors as not only strangers but not ‘as human’ portrays her deep sense isolation and lack of tutor support.

Christine portrayed a different experience and was not as apprehensive as other participants about seeking extra help and guidance from her tutors, although she did this privately by email.

‘They seem to – they kind of encourage it so, erm, if they’re offering I’m gonna use it’. (Christine)

Christine enjoyed interacting on the forum with other students and valued her tutors’ academic support and ‘a pat on the back when you get a concept right’. Christine’s geographical location meant that meeting her tutors face to face was not possible.

Comparing one’s self to others – ‘I tend to erm, maybe lose a bit of confident if I’m with a lot of people that appear to be doing a lot better than I can do’

Participants actively sought to establish their identity as students within the community by comparing themselves to others. These comparisons often left participants with a sense of self-doubt - they felt other students were more qualified or experienced than them.

‘They’ve all got a lot of experience in various different things and sometimes you worry about putting your neck on the line don’t you and looking a little bit silly, but em, you know, I’m happy to do that, but you know, I’d like not to look silly if possible.

Sarah, who was younger than some of the other students, worried that she may look ‘silly’ compared to more ‘experienced’ students and felt her contributions to the forum would not be as valuable. The forum posed a personal risk to her and her sense of trepidation made her reluctant to post on the forum unless she felt it was ‘worth sharing’.

‘I look up to a lot of them because they are, I find them quite intelligent and it’s a kind of, they give me like a standard to or a level to work with yeah? So there is a lot of respect there from that point of view.’ (John)

John’s sense of inferiority is accentuated by his feeling that his classmates are strangers who appear more intelligent than him. His benchmark comparison ‘to look up to’ suggests a lack of self-confidence. These feelings prevented him from establishing himself as a valuable member within the student community.

‘I tend to erm, maybe lose a bit of confident if I’m with a lot of people that appear to be doing a lot better than I can do’ (Fiona)

Fiona discusses a similar experience. Her lack of confidence and feelings of being undermined by other students is a barrier to her interacting.

Participants’ self-doubts posed a personal risk of embarrassment when discussing and sharing academic issues with other students. However, when students shared their personal struggles and anxieties this helped alleviate these feelings temporarily but persistent feelings of self-doubt led to a reluctance to ‘put your neck on the line’ in front of others.

Written communication as an ineffective learning medium – ‘knowing whether you know what you know or whether you’re kind of way off the mark’

Participants’ narratives revealed that all felt online learning was ‘a struggle’ and ‘hard work’. Janet describing it as ‘a necessary evil’ while John felt frustrated that his efforts went unrecognised. Participants felt uncertain of their understanding of the academic material and assignment requirements. Participants discussed different reasons for this- some attributing the problem to their own weaknesses and others to ambiguous guidelines. This uncertainty peaked towards the end of module and up to and including the assignments. Online learning with lack of face-to-face interaction was portrayed as not ‘true learning’, more ambiguous and somehow incomplete.

Janet and Sarah found reading the material off the screen difficult and discuss how reading printed copies ‘goes in better’.

‘there will be things that I don’t fully understand but I’ve managed to cuff it so far em, you know, had I been in a more face-to-face environment, I’m pretty sure that even just chatting to other peers, we’d have kind covered the bases and discovered where our little holes are and kind of filled them in for each other’. (Sarah)

Sarah felt fraudulent and concerned that compared to face-to-face learning her online learning was incomplete and lacked true understanding as she was unable to ‘chat’ through things with others. Her discussion of face-to-face learning with reference to other students as ‘peers’ reveals her ease in identifying with others face-to-face, in contrast to the online environment. The inability to informally and spontaneously talk things through meant participants often harboured feelings of self-doubt and ambiguity in relation to their assignments. They were often unsure whether they had fully understood.

‘you’re really trying to pull everything together and just hope that you’re heading in the right direction. […] ‘I miss it about getting the answers right away I think is what I miss. Having the discussions right away to kind of put you on the right track. Or not even put you on the right track but just to say I’m grasping some of this and you’re in the right direction.’ (Christine)

Christine portrays serious doubts about her understanding compounded by the lack of immediate feedback due to the time zone difference of her geographical location. We gain a sense of her frustration of needing help ‘right away’ but having to wait as she becomes plagued with ambiguity and self-doubt. This time difference also fuels her feelings of isolation ‘as when I’m doing my homework everybody else is sleeping’.

Christine and other participants valued the diversity of the discussion forums as a place for students to share knowledge and gain different perspectives. ‘it’s kind of nice for them to provide their perspective coz then I always think to myself, well I didn’t consider that. So, I’m learning a lot of things just on the discussion forum alone, which is kind of neat’. However, participants were reluctant to be the first to post their comments for fear that they might give the ‘wrong’ answer.

‘I’m one of those people who would come back the next day and revisit it unless I really knew my answer, or thought I really knew my answer, so I tend to sit and listen more and then I tend to talk. ’ (Christine)

The asynchronous discussion forum afforded participants extra time to formulate their thoughts and ideas. Christine also felt it afforded her protection from the ‘strong personalities’ and provided an equal opportunity for all students to participate in discussions.

‘I think if we were in a classroom – you always seem to have those strong personalities that take over – erm so I think you would find you wouldn’t get the depth of the responses that you do in a class that you find on the forum.’ (Christine)

However, students’ trepidation and reluctance in posting answers on the forum often meant discussion threads took time to get started. Participants recognized this in other students and attempted to support and encourage them by acknowledging and responding to their postings.

‘it’s nice to kind of acknowledge when someone’s says something that you agree with or likewise if there’s something that I feel completely differently, I’ll try and, you know, constructively, saying ‘well actually I feel this..’ but sort of make it more of a discussion as if we were having it in person.’ (Sarah)

Sarah struggles to express herself effectively using written communication, worrying that she may be misunderstood. She recognizes the fear of being judged by others and attempts to appear friendly and approachable whilst interacting and trying to effectively project her own ideas as a demonstration of her support.

Despite the communication difficulties associated with online learning all participants reported choosing the course because it provided them an opportunity to study which otherwise would be either ‘very difficult’ or impossible due to work, geographical and/or family commitments. The flexibility of “being able to do it at my own pace” and “study in my own time” were advantageous to all participants.

Despite symbolic communication difficulties which permeate their learning experience participants expressed enthusiasm in expanding their knowledge and experience identified as their most important learning outcome.

**Discussion**

It has been suggested that written communication is a beneficial way of learning- it helps students to become reflective about what they write, encouraging discipline and rigor in thought processing and communication (Garrison & Anderson, 2000). However for students this can be a frustrating and daunting experience and written communication may be experienced as a barrier to students establishing meaningful relationships. Our findings echo previous work that has discussed the importance of identity in online learning practices (Oztok, Lee & Brett, 2012) and has highlighted difficulties in establishing identity in written communication (Feenberg, 1989). The constraints of written communication devoid of the aspects of face-to-face interaction meant that participants often felt that they were not communicating with ‘real’ people and were unable to cultivate trust. Participants found communicating via text-based discussion forums ‘unnatural’ and ‘non-human’. This had a negative effect on their interactions and ability to establish meaningful relationships with other students and tutors. This lack of humanity lead to a sense of lack of tutor support and isolation as participants struggled to adjust and cope. Additionally, tutors may not be seen as genuine individuals with whom one can establish a meaningful relationship.

Previous work has suggested that levels of anxiety are high in novice online learners as they learn how to communicate online, but gradually decrease as they become more familiar with the medium and establish relationships with other students (Zemblylas, 2008). Paul’s experience gives insight into this difficult process as his anxiety escalates to feelings of bewilderment and frustration as he struggles to project his own identity and understand others’. However these feelings did not decrease over time as anxiety persisted in participants familiar with online learning, particularly in relation to posting comments on the discussion forum. The notion that everybody on the forum could ‘hear’ and ‘see’ them without the reassuring and meaningful reactions such as a nod of the head meant that communicating represented a real personal risk (Feenberg, 1989) of embarrassment in case they gave the ‘wrong’ answer, were misunderstood or caused offence. These feelings of trepidation and ‘not really knowing who you’re talking to’ made participants reluctant to interact. These findings do not support the pedagogical enthusiasm for the ease and abundance of CMC online learning (Garrison et al, 2000). Whilst participants recognized the risk involved in interacting they felt negatively towards other students who did not reveal their true identity and maintained their anonymity by using a pseudonym as a ‘kind of mask’ (O’Regan, 2003). This perceived lack of honesty and openness fueled their difficulties.

Participant’s accounts revealed different coping strategies for dealing with communication difficulties with Janet retreating from the pseudo ‘course world’ and John ‘forcing’ himself to interact. John’s experience shows that while interactive responses may increase over time (Rourke et al, 2001) as students become accustomed to this form of communication, negative feelings are not reflected in quantitative measures. Caution is necessary in equating increased frequency outcome measures to increased student amenity or satisfaction. Previous work has suggested that students who interact less are often less satisfied with their learning (Rovai & Wighting, 2005) and have higher attrition rates (Morgan & Tam, 1999). However, satisfaction as found in this study reflects students’ reactions to specific or multidimensional factors (Sherry et al, 1998), events and different affective states. It is possible to have mixed feelings of satisfaction and dissatisfaction- ‘at points be really satisfied’ and at others feel ‘it’s a necessary evil’. All participants conclusively found online learning harder than face-to-face learning which was reflected in their expression of more negative than positive emotions (McFadden, 2008; Zembylas, 2008). Whilst negative states may not reflect participants’ dissatisfaction with the course *per se* it does reflect their struggles in adjusting to and coping with this learning medium and supports the need to recognize emotions as fundamental to social and academic aspects of online learning.

Inherent to participants’ coping strategies was readily available and accessible support from other students on the forum. Participants found other students self-disclosures a source of encouragement and support as it puts students ‘on an even keel’ and reassures them- ‘you’re not on your own struggling’. Use of the forum in this way helps build a sense of student community (Rovai & Wighting, 2005). However, feelings of alienation did often persist. Participants’ personal risk of embarrassment and trepidation were also reflected in their reluctance to seek tutor support. The need for tutors to recognize these feelings and allay misconceptions and fears lends support to criticism that professionals may be de-valuing emotion with facilitators missing important emotional experiences of online learners (McFadden, 2008).

Our findings highlight the need for research methodologies that enable the identification of the psychological and emotional processes involved in online learning. Frequency of student interaction as a quantitative outcome tells us nothing of students’ experience and how they may or may not become accustomed to written communication. There is a need to recognize learners as experts of their own experience. Only in this way we can establish what is really important to online learners.

**Conclusion**

Student interaction is fundamental in establishing social and academic cohesion between students (Perez-Prado & Thirunarayanan, 2002; Rovai & Wighting, 2005; Shea, Hayes, Uzuner-Smith, Gozza-Cohen, Vickers & Bidjerano, 2014 ) and the online environment has been touted as a means of promoting constructivist learning (Schell & Janicki, 2013). However this study has highlighted how communication difficulties may act as a barrier to effective interaction. Written communication may be experienced as unnatural and ‘not as human’. As a result students may struggle to convey their own identity and understand others, with difficulties in establishing relationships. Students may be reluctant to communicate and contribute to discussion forums due to feelings of vulnerability and fear of getting it ‘wrong’.

To enhance student interaction important needs were identified:

1. The need for tutors to actively encourage online interaction.
2. The need for tutors to establish themselves as ‘human’ and approachable by cultivating a safe and interactive environment.

The need to provide spaces that encourage interaction and collaboration is well documented (Häkkinen & Hämäläinen, 2012). However it is not enough to simply lead learners to technology and tutors must provide assistance in how to form online learning communities (Orey, Koenecke & Crozier, 2010). This assistance may involve asking students to complete a shared biographical profile, engaging students in early ice breaker group activities and encouraging students to post questions using the discussion board forum, using private email only as a last resort.

Tutors may cultivate a safe and interactive environment by organizing one-to-one telephone meetings with students upon commencement of a learning unit. While frequent one-to-one interactions may not be viable due to demands on staff time, a brief telephone call as students embark on a learning unit is likely to make learners feel more confident in interacting with tutors and more able to seek support and guidance when needed.

These recommendations will help allay feelings of trepidation and the personal risk of embarrassment and will encourage student interaction to cultivate a sense of belonging to the student community, positively reinforcing academic and social support. A supportive environment will help alleviate feelings of isolation and alienation and enhance students’ coping skills in adjusting to the online environment.

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