

eCULTURE

Volume 3

2010

Article 16

Are They All The Same? Lurkers and Posters on The Net

Beth Walker*

Janice Redmond†

Andras Lengyel‡

*Edith Cowan University, elizabeth.walker@ecu.edu.au

†Edith Cowan University

‡Edith Cowan University

Copyright ©2010 by the authors. *eCULTURE* is produced by The Berkeley Electronic Press (bepress). <http://ro.ecu.edu.au/eculture>

Are They All The Same? Lurkers and Posters on The Net

Beth Walker, Janice Redmond, and Andras Lengyel

Abstract

Contemporary trends aim to shift the majority of services offered online. While expectations are very high that people will engage, learn and communicate via the Internet not everyone does and not all technologically designed services are successful. Little is known about online behaviour. This paper adds to the knowledge about two online behavioural groups, Lurkers and Posters by identifying two categories within each of these groups. The two types of Lurkers identified were categorised as Passive and Active Lurkers while the two types of Posters identified have been categorised as either Initial or Responding Posters. This information is valuable as educators and other service providers need to understand who is using their online services and how they might need to modify their service to achieve the best outcomes for their organisation and the clients.

Are They All The Same? Lurkers and Posters on The Net

**Walker, Beth
Redmond, Janice
Lengyel, Andras**
Edith Cowan University

Abstract: Contemporary trends aim to shift the majority of services offered online. While expectations are very high that people will engage, learn and communicate via the Internet not everyone does and not all technologically designed services are successful. Little is known about online behaviour. This paper adds to the knowledge about two online behavioural groups, Lurkers and Posters by identifying two categories within each of these groups. The two types of Lurkers identified were categorised as Passive and Active Lurkers while the two types of Posters identified have been categorised as either Initial or Responding Posters. This information is valuable as educators and other service providers need to understand who is using their online services and how they might need to modify their service to achieve the best outcomes for their organisation and the clients.

Introduction

Online services have grown in a race to capture the enormous market the Internet offers (Bishop, 2007; Lin, 2009; Parthasarathy & Bhattacharjee, 1998). How people engage, learn and communicate online is still largely unknown and factors affecting success of virtual communities include technological support, design, and the number of participants (Rafaeli, Ravid, & Soroka, 2004) and quality of content (Filpczak, 1998 cited in Ridings, Gefen, & Arinze, 2006).

The types of participants engaging in an online community have come under scrutiny as they too can have a significant impact on success (Bishop, 2007). In particular the motivations and behaviour of Lurkers and Posters, and to a lesser extent Shirkers, have been investigated. Of these participant types, Lurkers appear to create the most research interest. There are several reasons for this. Lurkers make up the highest proportion of participants, there is potential to convert them from Lurkers to Posters, these communities need to maintain a threshold level in order to survive, this cohort offers marketing and sales opportunities and they have also raised questions about free speech (Nonnecke, Preece, & Andrews, 2004; Ridings, Gefen & Arinze, 2006). Moreover, researcher opinions differ about their value to an online community, and whether or not they learn from their activities. Nonnecke, Preece and Andrews (2004) suggest that it is important to know how lurking affects online communities and how to appropriately manage Lurkers. This paper aims to build upon earlier work and provides demographic and behavioural data on a cohort of 105 Lurkers and 11 Posters that joined an online community and more limited data on the 184 Shirkers.

This research is part of a wider program of small firm training which included traditional talk and chalk seminars, interactive workshops and an online community. The program was a standalone training package, aimed at getting more small firm owners to become more 'e-savvy'. The program was designed in three parts, the first

ECULTURE

part being a seminar, with professional presenters giving the audience an overview of the importance of being engaged with technology for the benefit of their small firm. At the end of the seminar all participants were given login details to the dedicated website. The second part was an optional interactive workshop that was predicated on adult learning principals. The third and final part was the on-going opportunity to participate in an online community and to access other relevant information that had been posted on the site. From this three stage process the three different types of online participation was classified: Shirkers, Lurkers and Posters, based on their level of activity and engagement.

Literature Review

Online and Virtual Communities

Some debate has been raised about the definition of an online community (Preece, 2000) and the difference between that and virtual communities (Ridings et al., 2006). Preece, Nonnecke and Andrews (2004, p. 202) defined an online community as “the participants on a discussion board”. The key difference between the online groups and virtual communities is related to the two concepts of communication and relationship building. While “online groups can gather to complete organisational work tasks or short-term projects, virtual communities are longer-term, emergent, and based on personal relationships” (Ridings et al., 2006, p. 331). In this case, the interactive online forum was set up to be a combination of these two concepts, the group was called together to improve their knowledge of online applications and to increase the online presence of small firms. The forum was available for a period of 15 months and allowed the small firm participants to develop longer term relationships outside the forum if they desired. For the purposes of this paper we will call this group an online community.

Lurkers

The term Lurker has a negative connotation and the dictionary definition of lurk means to lie in wait often with malicious intent (The Merriam-Webster Dictionary, n. d.). According to Schultz and Beach (2004, p.4) several names other than Lurkers have been used to describe lurking behaviour including: Browser (Salmon, 2002), Legitimate Peripheral Participants (McDonald, 2003), Read-Only Participants (Williams, 2004) and Vicarious Learner (Lee & McKendree, 1999).

While definitions of what constitutes a Lurker differ, there is general agreement that they behave passively, they may have opinions, ideas and information of value to the community, and that they are a persistent but silent audience (Lee, Chen & Jiang, 2006; Rafaeli, Ravid, & Soroka, 2004; Ridings et al., 2006). Moreover, their peripheral participation will continue until a topic of interest is spotted (Whittaker, Terveen, Hill, & Cherny, 1998 cited in Rafaeli, Ravid, & Soroka, 2004). Lee et al. (2006, p. 404) refer to the Online Jargon Dictionary (Jargon Dictionary, n. d. Cited in Lee et al., 2006) which defines the term Lurker as: “One of the ‘silent majority’ in an electronic forum; one who posts occasionally or not at all but is known to read the group’s postings regularly.”

Ridings et al. (2006, p.331) argue that Lurker status should be defined as “someone with zero posting frequency” and found that Lurkers motivation and behaviour were very different from either infrequent Posters or Posters. Previous research has put zero and infrequent Posters together and this may contribute to some

ECULTURE

of the confusion about the benefits and behaviour of Lurkers. For the benefit of this paper we will use the term Lurker and maintain the position of Ridings et al. (2006) and maintain a zero posting frequency to be considered a Lurker.

Lurkers are more common than Posters and the reported proportions vary from 50 and 90 percent (Preece et al., 2004; Rafaeli et al., 2004; Ridings et al., 2006). True to their non-participatory nature, few Lurkers have responded to research activities that aim to explore their characteristics (e.g. 27% Lee et al., 2006; 7.7% Ridings et al., 2006).

Lurking has been considered a problem within virtual communities for some time (Rafaeli et al., 2004) yet Katz's (1998 cited in Nonnecke & Preece, 2001), suggested that Lurkers are valuable and other research has concurred finding them to be an important and integral part of any online community (Nonnecke et al., 2004; Rafaeli et al., 2004; Ridings et al., 2006). Nonnecke et al. (2004) have also suggested that more is needed to support effective lurking.

The reasons Lurkers lurk have also been investigated and the following explanations have been offered:

- Personal (Rafaeli et al., 2004).
- Enjoyment (Rafaeli et al., 2004).
- To learn about a community (Lee et al., 2006; Rafaeli et al., 2004).
- For work related activities (Rafaeli et al., 2004).
- To learn about a new topic (Rafaeli et al., 2004).
- Gaining familiarity or comfort with the medium (Rafaeli et al., 2004).
- Sense of belonging (Rafaeli et al., 2004).
- To gain virtual social and cultural capital (Rafaeli et al., 2004).
- Free-loaders or free-riders (Kollock & Smith 1996 cited in Lee et al., 2006; Rafaeli et al., 2004).

Whether Lurkers learn is another area of debate although most researchers believe there is some level of learning. Some assert that Lurkers learn through observation (Gulati, 2004 cited in Schultz & Beach, 2004; Lee & McKendree, 1999 cited in Schultze & Beach, 2004) while others argue that Lurkers are only learning to a limited extent and are missing out on deeper learning opportunities as they do not post or receive feedback from others (Draper, 1997). A few researchers suggest that Lurkers' behaviour can lead to effective learning (Lee et al., 2006; Nonnecke, Preece, Andrews, & Voutour 2004 cited in Lee et al., 2006).

Research by Nonnecke et al. (2004) outlined 20 reasons why Lurkers do not post, the top four reasons were: just reading/browsing (54%), still learning about the group (30%), shy about posting (28%) and nothing to offer (23%). Lee et al. (2006) found that when Lurkers did post, 55% of their posts were 'social talks', 27% 'domain knowledge' and 18% 'co-ordination compared with 66% of 'domain knowledge' posts from other Posters. Moreover, Lee et al. (2006) believed that the use of social as well as formal communication helped hold the communities together and to obtain the necessary competence of the community. Lee et al. (2006, p. 409) suggest that login was "a minimum for participation; the rift between willing to login and being able to post is the 'zone of lurking'".

Many different Lurking behaviours have been identified and include the following:

- Do not post (Ridings et al., 2006)
- Connecting (Rafaeli et al., 2004)
- Browsing (Rafaeli et al., 2004)
- Attending time durations (Rafaeli et al., 2004)

ECULTURE

- Responding in a reciprocal manner that reflects history (Rafaeli et al., 2004).
- They do not hinder the development of the community or deprive active members of resources (Nonnecke, 2000)
- Sustained behaviour (Lee et al., 2006)
- Similar login frequency to Posters but less posts (Lee et al., 2006)
- Their identity is embodied in their regular, frequent login (Lee et al., 2006)
- Establish local forms of ownership (Lee et al., 2006)
- Feel excluded (Lee et al., 2006)
- Deficient in ‘domain knowledge’ (Lee et al., 2006)
- May try to conceal their identity (Lee et al., 2006)
- May lack confidence to post (Lee et al., 2006)
- Attempt to align with the group in order to participate in an adequate way (Lee et al., 2006)
- Have less trust in the abilities and benevolence/integrity of others (Ridings et al., 2006).
- Invest much less social exchange costs and expect much less social exchange benefits (Ridings et al., 2006).
- Have a lower trust level (Ridings et al., 2006).
- Lower desire to participate in social exchange (Ridings et al., 2006).
- Spend less time in the community than Posters (Ridings et al., 2006).
- Desire social distance (Ridings et al., 2006).
- Have less respect for Posters (Nonnecke et al., 2004).
- Lack the drive to take action (Bishop, 2007).

Nonnecke et al. (2004) demonstrated that the amount of lurking varies in different types of communities with more of this behaviour on technical support communities (86%) and less in medical communities (46%). This notion of different behaviours by people based on the type of community is supported by Ridings et al. (2006). Moreover, lurking is only seen as a problem when there is “little or no message posting in a community... [as] Such online communities cannot survive” (Preece et al, 2004, p. 5). There is still limited understanding of Lurkers and their behaviour (Lee et al. 2006) and more work is necessary to develop knowledge in this area.

Posters

Although demographically Lurkers and Posters have been found to be similar (Preece et al., 2004), Posters are considered better participants than Lurkers as they actively engage with the online community and contribute social capital and encourage Lurkers to de-lurk (Rafaeli et al., 2004). Posters make up the smaller percentage of most online communities (Lee et al., 2006). While the term Lurkers has negative connotations little criticism has been made about Posters, in fact Posters are seen as the ‘workers’ (Egan, Jefferies, & Johal, 2006). The exception is the notation by Gulati (2004, p. 6 cited in Schultz & Beach, 2004) that “active learners may participate at the expense of their reflection time, and it is possible the silent learners are more engaged.”

Like Lurkers, Posters join online communities for personal reasons and to gain understanding. Posters have also reported that their needs are met in online communities; they perceive more benefit from participating in these forums, and feel a greater sense of membership than Lurkers but consider Lurkers to be members more than Lurkers do (Nonnecke et al., 2004). Posters also seem to be looking for the

ECULTURE

‘What’s in it for me?’ factor as Nonnecke et al. (2004) found that Posters were more frequently attracted to entertain others, build professional relationships, tell stories and offer expertise.

The work of Nonnecke (2003 cited in Nonnecke et al., 2004) and the more recent work also suggested that relatively few Posters do most of the posting and this dominance was off-putting for some Lurkers. This dominance may be similar to other situations where the use of power is not evenly distributed or groups are created (often referred to as the ‘purple circle’) that dominate organisations, intentionally or unintentionally. Bishop (2007) discusses online ‘elders’, a group that have been in a community for a long time that participate regularly and believe that their actions will have positive outcomes. This group may have similar status to others with power but according to Bishop in online communities they use their elder status in a constructive way to support others.

In this paper the behaviour of those that posted to an online community is reviewed to provide further insights to this group.

Shirkers

Little is known about Shirkers. Egan et al. (2006) appear to be the only researchers that have discussed and named this group this way. They investigated feedback by students of a revision questionnaire and identified this third group of online participants, Shirkers. Whereas Posters are active and Lurkers are more passive, given the opportunity to do so Shirkers do not access a site at all. Shirkers in the sample of Egan et al. (2006) made up about 10% of the students although the researchers (Egan et al., 2006) reported about others that had up to 41% of this cohort. In this paper Shirkers are identified that had the opportunity to access an online community. But did not utilize it.

Transition from Lurkers to Posters and Vice Versa

Egan et al. (2006) called their Posters workers, and found that they were strategic Lurkers when they were unsure of the answer to a question. In fact, there is evidence in other research that some Posters lurk for a period of time or that they are de-lurking yet may still identify as a Lurker (Ridings et al., 2006). There is also support for allowing Lurkers to remain passive until they feel comfortable as persistent involvement has the potential to move them from being Lurkers to Posters (Rafaeli et al., 2004). Lee et al. (2006) also report research that suggests Lurkers may begin to post when they feel confident of a positive response to postings or replies and Ridings et al. (2006) also thought there might be an intermediate step between lurking and posting.

Different online communities may see Lurkers become Posters (Ridings et al., 2006), and one would expect the opposite to also be true. Rafaeli et al. (2004) also acknowledge that online behaviour changes when different media is used. Nonnecke et al. (2004) suggested that future research should seek to understand whether Lurkers would like to be Posters and what support could be offered to help them make this transition.

These finding suggests that people are not always consistent in their online behaviour category. Moreover, people that are both Posters and Lurkers may provide a good avenue for research that seeks to understand the decision making process of whether to post or lurk when engaging in online communities.

Using Online Communities for Small Firm Education and Training

In the field of education caution has been raised about letting online learning sites take over from face to face teacher/student contact. It is generally agreed that blending online and traditional teaching methods is preferable to improve student learning experiences and outcomes (Egan et al., 2006; Ho, 2002; Walker, Redmond & Morris, 2010). The goal of adult learning is to provide 'deep learning' and this can only occur when there is effective participation by both the student and the learner (Ho, 2002; Walker et al., 2010). Weigal (2002) has suggested that the real contribution of technology is overestimated and often the way it is used does not develop deep learning. In addition, practical relevance is one of the reasons for embedding discussions into the learning process (Ho, 2002).

Much of the information about online communities is set outside small firm education and training, however, this cohort is becoming increasingly interested in online services (Lawson, Alcock, Cooper, & Burgess, 2003). Small firm owner-managers are a difficult cohort to attract to education and training (Ehrich & Billett, 2004; Redmond & Walker, 2008; Storey, 2004; Webster, Walker, & Brown, 2004). Success in attracting this cohort into education and training usually incorporates the following elements: face-to-face contact, relationship building processes that lead to trust between the small firm participant and the training provider, timely, specific, practical, based on core activities and delivered in small, specific chunks at a convenient location for the participants (Jeffrey, Hide & Legg, 2010; Redmond & Walker, 2008). Small firms are an important part of every economy and as such an educated and skilled labour force is considered to be essential to their success and growth of and for the businesses to gain some competitive advantage in the global economy (Cosh, Duncan, and Hughes, 1998; Huang, 2001), yet little is known about their learning (Thorpe et al., 2006).

For these reasons an education and training program was designed for small firms that offered each of these elements via traditional training processes and an online community. This paper analyses the activity and engagement by the small firm participants in the online community to provide further information regarding the three categorised groups usually discussed in research related to online communities: Lurkers Posters and Shirkers.

ECULTURE

Methodology**Research Question**

The education literature has consistently identified Lurkers and Posters within online communities but has tended to treat those within each group as homogenous, rather than acknowledge differences. The high number of identified behavioural characteristics of Lurkers and the reasons why they lurk suggest that there may be more than one type of Lurker frequenting online communities, yet there is no literature that has delineated this or sought to clarify how identification of different types of Lurkers might be important to the design and success of online communities. Neither does there appear to be any attempt to do this type of categorisation with Posters. The overall research focus was to delve deeper to ascertain if there could be further segmentation of the groups. The following six research questions were set for this research:

1. What proportion of possible participants in online communities are Shirkers?
2. Are there both Lurkers and Posters within the online community?
3. Are there different types of Lurkers within the online community?
 - 3a. If there are different types of Lurkers within the online community what factors differentiate between them?
4. Are there different types of Posters within the online community?
 - 4a. If there are different types of Posters within the online community what factors differentiate between them?

Data Collection

The data for this research has been derived from two different sources. The first source was the basic registration information that all attendees had to complete before attending the seminar ($n_1 = 300$). The registration had to be completed by the small business owners online and included personal and business demographic details. The second data source was derived from the log files of the online learning platform ($n_2=116$).

Results

Of the 300 potential participants that were able to enter the online community only 116 activated their login. Those that did not login (184 participants or 61%) have been classified as Shirkers, that is, they did not access the site at all. Of the 116 who did login only 11 (four per cent) were classified as Posters and the other 105 (35%) were Lurkers. Therefore, the answer to research questions 1 and 2 is affirmative; there were Shirkers and Lurkers and Posters within this online community.

Based on basic counts of some measures (i.e. number of logins, clicks per login and length of time online) the online community participants who were classified as Lurkers were divided into two groups. These we have classified as Passive Lurkers (PL) and Active Lurkers (AL). Therefore, the answer to research question 3 is affirmative; there were two types of Lurkers within this particular online community. In answer to research question 3a, the additional factors that differentiate between these two groups were their level of engagement and their activities. That is, PLs display less engagement and activity than both ALs and Posters while ALs display less engagement and less activity than Posters.

ECULTURE

There was also a difference in the behaviour of Posters and we have classified them into two groups, Initial Posters (IP) and Responding Posters (RP). Of the 11 total Posters all but one was an Initial Poster (i.e. the Poster asked a new question or raised a new issue but did not continue the thread) rather than being a Responding Poster (i.e. Posters whose first post was a direct response to someone else asking a question). Therefore, the answer to research question 4 is affirmative; there are two types of Posters within this online community. Finally in answer to research question 4a, the factor that differentiates between these two groups is the type and amount of posting they do. That is, Initial Posters, post original material whereas Responding Posters only post responses to someone else's original material. It may be that this second type of Poster has a propensity to altruistic behaviour or they may initially lack perceived competence or confidence to post anything original. The implications of this finding will be outlined in the discussion section of this paper. There is also a logical third Poster, that is the Engaged Poster who both initiates and responds in the virtual conversation. In this particular circumstance, there were no Engaged Posters, which in itself is a finding.

Discussion

The identification of two types of each behavioural group, Lurkers (Active and Passive) and Posters (Initial and Responding), is the key finding of this research.

In regard to the two different Lurkers, there were many (approximately 65%) that only went on the website once. There were also a significant number (approximate 18%) that only went on to the website twice. These two groups are Passive Lurkers, which make up 83% of the total cohort. The rest of the Lurkers, who we have been classified as Active Lurkers logged on between three and 15 times. Within the Active Lurker group, their level activity ranged from three different activities logged into on the site, to 64 activities logged. This is a huge range span but would certainly suggest that some of the participants were most definitely active, but were not able to make the leap from Active Lurker to Poster.

The separation of Initial and Responding Posters has opened a new focus of conversation regarding the behaviour of Lurkers and Posters and suggests that reasons that participants' post may hold another dimension which correlates with other identified factors such as domain knowledge, competence and belonging and adds to this by identifying an altruistic motive of Lurkers. The one Responding Poster had been Lurking on the site, but had not posted previously, responded when a broad question was asked as 'bait' to tempt new Posters onto the site.

Lee et al. (2006) suggestion that the rift between willing to login and engage and being able to post is the "zone of lurking", which may be a useful context in which to analyse this behaviour. The Responding Poster was tempted to respond to the 'bait' presented, thus move out of the "zone of lurking" only when he felt that a question was asked that was within his competence to answer, no one else was answering and someone needed help, in other words he had an altruistic motive for transitioning from Active Lurker to Responding Poster. This behavioural change mechanism suggests that to help Lurkers transition to Posters online, educators and discussion board facilitators may need to place questions/material on their sites which cover the range of competence levels of the specific community but also, and more importantly, provide opportunities for Lurkers to feel that their participation is needed and that they can add something that is useful and share their knowledge. This is the basic tenet of Knowles' six principles of adult learning (Knowles, Holton & Swanson, 2005), which are: adults are internally motivated and self-directed; adults bring life

ECULTURE

experiences and knowledge to learning experiences; adults are goal oriented; adults are relevancy oriented; adults are practical and adult learners like to be respected.

Conclusion

In order to engage online participants to go from being Shirkers to Lurkers or Posters and for Lurkers to become Posters, there has to be a significant 'what's in it for me' aspect, based on basic andragogy. With regard to this study, a good enough case was clearly not made as to why the participants should engage in the online community and continue to learn about the subject matter from the facilitator and their peers, albeit in a less structured way than in the seminars and workshops.

The results of this research suggest that in order for the online learning platforms to reach a certain momentum where participants can learn from their peers by active online behaviour (i.e. posting) appropriate incentives agreed to by the participants should be provided by the facilitators or the platform's moderators. Thus the facilitators need to concentrate more on motivating the platform's user to participate and engage in the online learning activities. In particular, facilitators should ensure that they allow time for others to answer a post and contribute to a solution before they respond. In higher education the incentive of mark allocation is often used with variable success to create a higher engagement in online learning. As small business owner-managers can have very different learning goals (i.e. they are not looking to pass a unit) the solution may not be so simple. In their case, an appropriate incentive model needs to be identified and agreed to by the cohort of the online learning community.

There are two possible explanations as to why some participants did not engage at all, or why the rest only participated in a marginal way. The first is that they were not sufficiently enthused by the topic to become self directed learners and that they were not sufficiently interested to learn more. From a more positive view, the information that was provided in the seminars and workshops was sufficient for their immediate needs and again using one of Knowles' principles, the participants original goals were fulfilled by the other forms of learning instruction, and they felt no need to continue on with the online option. Either way, this study has only just scratched the surface, and if all participants are to be effectively engaged, there is clearly a whole research agenda around this topic.

References

- Bishop, J. (2007). Increasing participation in online communities: a framework for human-computer interaction. *Computers in Human Behaviour*, 23, 1881-1893.
- Cosh, A., Duncan, J., & Hughes, A. (1998). *Investing in training and small firm growth and survival: An empirical analysis for the UK*. DfEE Research Report RR36, London: HMSO
- Draper, S. (1997). Lurking and learning. Retrieved 9.9.2010 from <http://www.psy.gla.ac.uk/~steve/LandL.html>.
- Egan, C., Jefferies, A., & Johal, J. (2006). Providing fine-grained feedback within an on-line learning system – identifying the workers from the Lurkers and the Shirkers *The Electronic Journal of e-Learning*, 4(1), 15-24.
- Ehrich, L., & Billett, S. (2004). Learning new practices in small business: engagement and localised support. *Education and Training*, 46(8/9), 501-509.
- Fuller, A., Hodkinson, H., Hodkinson, P., & Unwin, L. (2005). Learning as peripheral participation in communities of practice: a reassessment of key concepts in workplace learning. *British Educational Research Journal*, 31(1), 49-68.
- Ho, S. (2002). Encouraging on-line participation? Proceedings of the 11th Annual Teaching Learning Forum, 5-6 February 2002.
- Huang, T. C. (2001). The relation of training practices and organizational performance in small and medium enterprises. *Education and Training*, 43(8/9), 437-444.
- Jeffrey, L. M., Hide, S., & Legg, S. (2010). Learning characteristics of small business managers: principles for training. *Journal of Workplace Learning*, 22(3), 146-165.
- Knowles, M. S., Holton, E. F., & Swanson, R. A. (2005). *The adult learner* (6th ed.). Amsterdam: Elsevier.
- Lawson, R., Alcock, C., Cooper, J., & Burgess, L. (2003). Factors affecting adoption of electronic commerce by SMEs: An Australian study. *Journal of Small Business and Enterprise Development*, 10(3), 265-276.
- Lee, J., & McKendree, J. (1999). Learning vicariously in a distributed environment. *Active Learning*, 10, 4-9.
- Lee, Y., Chen, F., Jiang, H. (2006). Lurking as Participation: Community Perspective on Lurkers. Identity and Negotiability. Retrieved from <http://delivery.acm.org/10.1145/1160000/1150093/p404-lee.pdf?key1=1150093&key2=4869804821&coll=GUIDE&dl=GUIDE&CFID=103935473&CFTOKEN=48221647>
- Lin, C. A. (2001). Audience attributes, Media supplementation, and likely online service adoption. *Mass Communication and Society*, 4(1), 19 - 38.
- McDonald, J. (2003). *Let's get more positive about the term 'lurker'*. Retrieved August 30, 2010, from <http://www.groups-that-work.com/GTWedit/GTW/lurkerprojectcopworkshopspring03rev.pdf>
- Nonnecke, B. (2000). *Lurking in e-mail based discussion lists*. London: South Bank University.
- Nonnecke, B., & Preece, J. (2001). Why Lurkers lurk. Proceedings of the Americas Conference on Information Systems.
- Nonnecke, B., Preece, J., & Andrews, D. (2004). What Lurkers and Posters think of each other. Proceedings of the 37th Hawaii International conference on System Science.
- Preece, J., Nonnecke, B., & Andrews, D. (2004). The top 5 reasons for lurking: Improving community experiences for everyone. *Computers in Human Behavior*, 20(2), 201-223.

ECULTURE

- Rafaeli, S., Ravid, G., & Soroka, V. (2004). De-lurking in virtual communities: A social communication network approach to measuring the effects of social and cultural capital. Proceedings of the 37th Hawaii International conference on System Science.
- Ridings, C., Gefen, D., & Arinze, B. (2006). Psychological barriers: Lurkers and Poster motivation and behaviour in online communities. *Communications of the association for Information Systems*, 18, 329-354.
- Schultz, N., & Beach, B. (2004). From Lurkers to Posters. *Australian Flexible Learning Framework for the National Vocational Education and Training System 2000-2004*. Retrieved from <http://flexiblelearning.net.au/resources/LurkerstoPosters.pdf>
- Shang, R., Chen, Y., & Liao, H. (2006). The value of participation in virtual consumer communities on brand loyalty. *Internet Research*, 16(4), 398-418.
- Storey, D. (2004). Exploring the link among small firms between management training and firm performance: a comparison between the UK and other OECD countries. *International Journal of Resource Management*, 15(1), 112-130.
- Parthasarathy, M., & Bhattacharjee, A. (1998). Understanding post-adoption behavior in the context of online services. *Information Systems Research*, 9 (4.), 362-379.
- Redmond, J., & Walker, E.A. (2008). A new approach to small business training: Community based education. *Education and Training*, 50 (8/9), 697-712.
- Ridings, C., Gefen, D., & Arinze, B. (2006). Psychological barriers: Lurker and Poster motivation and behavior in online communities. *Communications of the Association for Information Systems*, 18, 329-354.
- Salmon, G. (2003). *E-tivities: the key to active online learning*. London: Kogan.
- The Merriam-Webster Dictionary (n. d.). Retrieved from <http://www.merriam-webster.com/dictionary/lurker>
- Thorpe, R., Gold, J., Holt, R., & Clarke, J. (2006). Immaturity: The Constraining of Entrepreneurship. *International Small Business Journal*, 24, 232-250.
- Walker, E.A., Redmond, J., & Morris, R. (2010). Is financial reward overriding good pedagogical practices? *People & Place*, 18(2), 1-9.
- Webster, B., Walker, E. A., & Brown, A. (2005), Australian small business participation in training activities, *Education and Training*, 47(8/9), 552-561.
- Weigal, V.B. (2002). *Deep learning for a digital age: Technology's untapped potential to enrich higher education*. San Francisco: Jossey-Bass.
- Williams, B. (2004). Participation in on-line courses – how essential is it? *International Forum of Education Technology and Society Formal Discussion Initiative*. Retrieved, August 30, 2010 from http://ifets.ieee.org/discussions/discuss_september2004.html

Acknowledgements

We acknowledge the contribution of the Let'sGo! Let's Get Online team, Mike Smith, Lynne Thornton, Bernadette Strahan and Susie Vergers, in making this research possible.