Connecting Adult Learners through an Online Community: Challenges and Barriers

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Abstract: While online communities of various natures proliferate in cyber space, our understanding of the reasons underlying their success or failure is quite limited. Current study aims to contribute to this area through exploring motivating or inhibiting factors that influence adult learners' participation in an online community. The virtual community under study was intentionally formed upon an existing physical community. Initiated by the Faculty, an online community was created to sustain and reinforce community of part-time doctoral students. Our study intends to explore into two questions: what are the critical factors determining members' participation in the online community when it was built upon their existing physical group? What are the challenges or issues confronted by externally initiated communities? As matter of fact, there is a myriad of factors that might motivate or impede people's participation in virtual community. Our research focuses on members' need for and perception of online community which are considered as most crucial contributing factors of their participation. At the same time, we took into account users' comfort level with and experience of using computer-mediated communication. Interview was used as the major instrument for data collection. Our study results will not only shed light on people's perception and behavior in virtual realm, but also inform the design efforts to create nurturing environment for virtual communities.
Keywords: online community, online participation, motivation

Introduction

As Internet penetrates into every fiber of our society, online communities of various nature and scale proliferate in cyber space. The social impact of cyber community and its relationship with real-life community have attracted research attentions in many fields. Internet was argued to increase, decrease or supplement our social capitals and in recent years, the supplementary relationship between online and offline life has gained increasing currency. The online communication can supplement our offline social relationships (Barab, MaKinster, & Scheckler, 2003; Brown, J. S. & Duguid, 2000; Koku, Nazer, & Wellman, 2001); and conversely, physical communities can be reinforced and sustained through computer-mediated communication (Blanchard & Horan, 1998; Conrad, 2002; Haythornthwaite et al., 2000; Wellman & Gulia, 1999). Online community is supplementary to, instead of supplanting of the offline community (Gaved, 2005).

Our study seeks to examine a virtual community built to sustain an existing face-to-face group of adult learners. The informants are part-time doctoral students at a local university who don't have time and chance to meet face-to-face regularly. Post-graduate study, as known to all, is a long journey which demands persistent concentration and sustained motivation for its success. For part-time students with full-time job obligation, this task seems more daunting. Under this circumstance, the Faculty advocated that an online community should be built to enable sharing of experience and exchange of social support among adult learners. However,

after the first or two weeks, the online discussion dried out. Our study seeks to probe into the root of this problem by focusing on members' perceived drivers and barriers to their participation in online community. In addition, we take into account two main characteristics of the online community under study: first, it was intentionally formed and externally initiated instead of self-organizing. Second, it was built upon an existing physical group. Thus the research questions that guide our inquiry are: what are the critical factors determining members' participation in the online community when it was built upon their existing physical group? What are the challenges or issues confronted by such externally initiated community? The result of our study will not only shed light on people's perception and behavior in virtual realm, but also inform the community-building initiatives and design efforts to create nurturing environment for virtual communities. Our findings will be especially relevant to virtual communities initiated in top-down manner and as an extension of face-to-face group.

Literature Review
Online Community

Community is considered the most elusive and vague term in sociology (Abercrombie, Hill, & Turner, 2000). Although the term of community seems readily definable, Fernback (1997) pointed out, it "is infinitely complex and amorphous in academic discourse" (p. 39). The task of defining online community, in this way, seems more formidable considering the absence of physical co-presence and social cues in cyber space. Hence, the objective of this section is not to nail down the ultimate definition of virtual community, but to highlight its defining characteristics. Generally speaking, there are two approaches in the scholarly discourse on virtual community: one treats it as an objective entity which can be studied and measured with certain criteria. The fundamental assumption of this approach is that one can evaluate the establishment of an online community through studying its external conditions. Conversely, the other approach takes the socio-psychological stance by focusing on the sense of community among members. Instead of the external conditions, this approach focuses on something inside members of the group. In our following discussion of defining attributes of online community, we will combine both stances to present a more comprehensive picture.

The essence of community, Fernback (1999) claims, is commonality - something shared by members, such as, neighborhood, interest or professional practice. On the basis of commonality, communication is also fundamental to community building, both online and offline (Watson, 1997). In addition to commonality and communication, Yoo and associates (2002) added continuance, and cyberspace as the defining features of virtual community. Similarly, Jones (1997) outlined four conditions to be met for an online group to be labeled virtual community: 1) a minimum level of interactivity; 2) a variety of communicators; 3) a minimum level of sustained membership; and 4) a virtual common-public-space. Likewise, the working definition of virtual community developed by Lee and her associates (2003) highlighted the following three aspects: technology-enabled cyberspace, member-driven communication and the resulting relationship. All these three versions of definition described online space as necessary but not adequate condition for emergence and evolvement of online community. Online space is concerned with the network infrastructure which provides technical platform for online community to form and grow. Built upon the web-based platform, online community is characterized by commonality shared by members, interaction for an extended period of time and the social relationships among members.

From socio-psychological perspective, Conrad (2005) defined community as a "general sense of connection, belonging, and comfort that develops over time among members of a group who share purpose or commitment to a common goal"(p. 2). Along the same vein, Watson (1997) argued, community were more concerned with communion or intimacy – the emotional attachment felt by the members towards community. That's why judgment of community should center on participants' perception. Therefore, from this perspective, online community is more concerned with sense of community – the emotional attachment and sense of belongings shared by members.

Online and Offline Communities

When it comes to Internet's impact on our social life and psychological well-beings, researchers haven't reached consensus. Generally speaking, there were three viewpoints which describe Internet's impact as increasing, decreasing and supplementing social capital. To test out these theories, Koku and associates (2001)conducted a large-scale survey and concluded that Internet was most effective as extension of real-time interaction. A series of longitudinal researches led by Kraut presented an interesting change of Internet's social impact over time. In 1998, Kraut and his associates examined the social and psychological impact of Internet and reported adverse effects of online life such as declines in social involvement and increase in depression, stress and isolation. However, after three years follow-up to examine the long-term impact of communication through Internet, the data showed that most of the negative effects dissipated (Kraut, Kiesler, & Boneva, 2002). It can be concluded that online communication can enrich, extend and supplement face-to-face interaction. The reverse is also proved to be the case: face-to-face ties are often viewed as a necessary precondition for online trusting (Blanchard & Markus, 2002) and offline meeting can also reinforce on-line ties (Wellman & Gulia, 1999). Just like real-life community can be extended to cyber space, relationships started online rarely stay there (Parks & Floyd, 1996). In light of the supplementary and reciprocal relationship between online and offline communication, it is recommended to build online community when an existing group has too little opportunity for face-to-face interaction (Sproull & Kiesler, 1991). The online community can be viewed as the extension of physical group or another channel to augment their face-to-face interaction.

Motivating and Inhibiting Factors for Participation

The virtual community won't automatically take shape by the availability of the online space (Rheingold, 2000). When you build, people won't automatically come. Furthermore, the existing offline connection, as we witnessed, didn't naturally extend to online space. Therefore, the conditions for community formation and growth become a question of vital importance. Some of the critical questions are: what bring people together to form a community in the first place? What are the motivating and inhibiting factors for people's participation in online community? To answer these questions, we tap into research on community and online communities of various natures. What we gleaned from the literature not only informs our instrument development, but also serves as framework for later discussion and interpretation. In the following, we will highlight some important areas that affect people's engagement in online community.

Brown (2001) observed that one of the preconditions for people's participation in online community was the perception of personal or academic needs to be part of it. She denoted, "community did not happen unless the participants wanted it to happen" (p. 31). Needs, in this sense, are paramount preconditions for the existence of a community and driving force for people's participation. Additionally, Butler and associates (2002) argued that people's needs, to a large extent, determined their online behavior. For example, those valued information benefit might only be interested in reading posts. Those who actively seek social relationship might be involved in more interactive conversation. The administrators might participate out of more altruistic consideration. Then the critical question arises: what constitute our needs for community? Sergiovanni (1994) highlighted three major source of needs for community: extrinsic motivator, intrinsic worth and moral obligations. Extrinsic motivator is concerned with perceived value or gain from community involvement. Intrinsic worth pertains to psychological recognition of meaning and worth of participating in community. The third reason for community participation is related duty and obligation we feel towards the bigger community. Wasko and Faraj (2000) reached the similar conclusion in spite of the different approach and theoretical underpinnings they employed. They summarized three categories of reasons for online participation: tangible returns, intangible returns and community interest. Tangible return might take the form of useful information or answers to specific questions. Intangible gain referred to intrinsic satisfaction, self-confidence or self-efficacy. Still there are some people who were driven by the obligation to the community.

To sum it up, there are two major reasons for engagement in online community: self-interest and moral obligation. Some people join in online activities in hope for return, either tangible return like information or solution to certain problems; or more intangible return like companionship, emotional support or psychological satisfaction. They participate out of desire to obtain. If they can't get what they want, they will cease to take part. Therefore, the conditions for their participation in online community will come down to whether the community can fulfill their needs. On the other hand, for the other group of people, participation in community is like duty or obligation. They do because it's what a member of a community is supposed to do. For them, participation entails more contribution than self-interest fulfillment. No matter what attract people online, a vibrant online community need both consumers and contributors since it must address of problem of supply, demand (Ardichvili, Page, & Wentling, 2003). Members have to be willing to contribute and to use the online community as source of knowledge. Besides, they have to be comfortable with CMC. Although technology aspect won't be the emphasis of present study, we still need to tell whether technology poses barrier to people's participation. Here, technology is less concerned with the interface of online platform, but more with users' comfortable level with web-based asynchronous communication and previous online experience which were identified by Vonderwell and Zachariah (2005) as attributable factors that determined students' online engagement.

Members' need for community, as we discussed earlier, is precondition for their community engagement. However, the need for community does not translate directly into the need for online community. To reveal the driving force that turn people to cyberspace to seek social support, Dunham et al. (1998) investigated into the online supporting communities among cancer patients; Turner et al. (2001) explored the virtual communities among single mothers. They all found that availability and quality of the social support in real life seemed to be correlated with

participation in online community. If people couldn't derive enough or desirable social support from local resource, they would turn to virtual world as an alternative. In our study, the online community among Ed.D students was built to provide social support to part-time students. The fundamental assumption behind it was that social support was vital to post-graduate study and it could be delivered through web-based platform across physical and temporal boundaries. Thus in our study, we will reflect on this assumption and examine adult students' need for and perception of social support in their doctoral study.

In light of the literatures, our attempts to unveil the reasons behind people's participation in online community will start from understanding people's needs. Then we will burrow deeper into the reasons for and expectation of online community engagement. Users' technical proficiency and previous experience with virtual communities will also be taken into account. Meanwhile, we can't ignore the effect of existing social liaison on people's online behavior when the online community is built as an extension of a real-life one. Previous face-to-face contact could mitigate the problem of trust and social presence online(Ardichvili et al., 2003; Kavanaugh, Carroll, Rosson, Zin, & Reese, 2005). With the sense of community already in place, members might be more motivated to participate.

Methods

Five part-time doctoral students of education were purposefully chosen as informants. These five adult learners all belong to the same cohort in the same division within the Faculty. In another word, they all belong to a sub-group of a larger community of EdD students. This cohort was selected due to their research interest in the field of IT and education. It was assumed that this group should have higher technical competency and more interest in using ICTs in their own learning. Among them, there were four males and one female. As part-time doctoral students, they all have full time job obligation. During the study, the informants were close to the end of their first year doctoral study.

Interview questions consisted of both structured and semi-structured questions. Informed by literatures reviewed earlier, interview questions were centered on three aspects: technology, social support and community. The technology aspect will reveal their use of Internet, their comfort level with asynchronous computer-mediated communication and experience of online community. The purpose is to evaluate whether technology pose challenge for their participation. The social support was singled out on the account that online community among doctoral students was meant to enable exchange of resource and social support. We examined participants need for and availability of social support at current stage. The aspect of community will accentuate members' perception of community: their needs, expectation, motivating or inhibiting factors that influenced their participation. All the conversations were recorded and transcribed for later data analysis.

Findings

All the five informants use Internet as information tool and vehicle for social interaction. When comparing real-time conversation and asynchronous CMC, one student expressed preference over real-time conversation at all times; whereas one thought F2F and CMC were more or less the same. The other three thought both ways of communication had their strength and could fit into different situations, e.g. F2F might be better for brainstorming, building trust,

establishing liaison, while CMC enabled us to attach files, continue discussion when people are physically dispersed. As to the role of social support in their post-graduate study, four students reckoned it as very important with one thought it was somewhat important, but not essential. Three perceived the current status of social support as OK, while two felt it was not enough. Social support was interpreted by the informants as support, sharing and caring among peers. It could be either intangible as mental support or tangible like sharing materials. The purpose of the social support was to keep everyone on the right track and in progress during the academic journey. When it comes to virtual community among them, the EdD students we interviewed showed diverse perception. Four students thought it's a good idea to have an online community yet concerns over various issues was manifested, for example, doubt about how successful it could be, importance of having a facilitator. Still, there was one student who was not convinced about the necessity of extending community to online space. Only one learner expressed enthusiasm over equipping community with both online and offline communication.

Generally speaking, there are two main things members wanted to derive from online communication: resource sharing and seeking help. The adult students wanted a place to share useful information, and to seek help to various personal problems. Emotional support – an important element of community value - was only mentioned by two students as allure of online community. One learner also anticipated that online conversation could cement social connection among group. When reflecting on the motivating factors for their participation, all respondents underscored useful information and one stressed the need for community. However, when asked who was responsible for producing useful content, four students thought it was the duty of the facilitator or active members. Only one student said "everyone is responsible for making it work". Having said this, all the informants showed willingness to answer others' questions if time and ability permitted. In addition to useful content and facilitator, various concerns and barriers to their participation were heard. Three students looked on time as an issue since asynchronous communication was simply more time-consuming. Two showed confusion over the purpose of online discussion saying information could be obtained through other channels like Email or web-based announcement. In addition, one student was afraid that diverse research topic and background of research students could jeopardize group cohesion and interaction. One expressed doubt over the ability of himself and other peer students to provide useful information and solution. For only one student, technology might become hurdle since he called himself "non-technical person".

Discussion

Perceived Drivers and Barriers

Overall speaking, the need for virtual community was not very strong among the adult learners in our study. Although most of them thought it was a good idea, reservation and concern of various kinds were expressed. The online community among part-time postgraduate students, in their opinion, would be something nice to have, but won't exert huge impact on their study. To explore their need deeper, we found their expectation could be summarized to information sharing, solution to individual problems and emotional support. Unanimously, they stated that the appeal of the virtual community resided in interesting and useful content. However, only two informants recognized the benefit of online community to psychological well-being. For those who only saw online community as source of information, confusion and uncertainty arose like one mentioned: "I can obtain information through other channels, for example, Internet search or

email. So what's the point of having online community?" As matter of fact, the strength of online community lies in its ability to provide the blend of services, content and relationships (Williams & Cothrel, 2000). In addition to sharing information, members can also seek help to academic or personal problems and provide emotional support to each other. Also, online discussion boards can provide "a sense of place, context and history" (Kim, 2000). All the postings are kept in one place and research function can be executed easily to locate messages in need. Unfortunately, the potential and benefits of such online community were not known to all of our informants. In addition to lack of desire and awareness of what community can afford, there are a number of perceived barriers. It has been pointed out that the asynchronous communication takes more time and efforts (Brown, R. E., 2001; Haythornthwaite, Kazmer, & Robins, 2000). Our informants concurred, but they also expressed that the value of the online community could justify the time and efforts paid. "If it's something I can only get from there (the online community), I will invest time and efforts" as one student put.

Issues of externally initiated community

As we mentioned earlier, members' needs are driving force of their participation and the fulfillment of these needs is held as the goal of communities. When the community is not emergent and self-organizing based on members' needs, three major issues surfaced in our case. The first issue is ownership of the community. By nature, community is a collective entity and ownership of the community should be shared among all members. When the community is imposed on instead of emergent, this sense of ownership will be hard to instill. This was reflected, in our case, through over-dependency over facilitator and perceived passive role of members. Admittedly, facilitator can play critical role in initiating dialogue, maintaining motivation and engagement (Anderson, Rourke, Garrison, & Archer, 2001; Youngblood, Trede, & Corpo, 2001). However, the informants in our study showed great dependency over facilitator to provide useful information and initiate questions interested to all. Besides, facilitator was expected to be sensitive to members' needs, dedicated in facilitating discussion and knowledgeable to answer questions. As members of the community, they saw their own role as quite passive - more like a follower, not the owner of the community. Secondly, the goal of the community might be vague or disjoint with members' needs. In our case, the top-down intervention with little consideration of local needs caused confusion among students over what should be expected from online community. The absence of well-stated purpose or missions of the community exacerbated the situation. The adult learners were unclear not only about why they should participate, but also about how to participate in this online community. Thirdly, when the community was not emergent from members' needs, they will lack the innate motivation to participate. The internal motivation is especially critical in online community where communication takes more time and physical cues are absent. The point we want to make here is not that externally initiated online community was impossible, but it required more design efforts and consideration than naturally grown one. To start, community developers should get to know people's concerns and needs and make them as motivator for community engagement.

The existing social liaison has exerted both positive and negative effect on the development of online community. On the positive side, prior social relations dissolves the concern over identity and credibility of person they communicate with (Ardichvili et al., 2003; Kavanaugh et al., 2005). Our findings confirmed this claim. However, the existing social affiliation was not perceived as an incentive to their active participation as Kavanaugh and associates noted (2005).

On the negative side, the prior network could make online community seems redundant, especially in the tightly knit local group (Ardichvili et al., 2003). Although adult students in our study are more dispersed and loosely connected, they express the similar feeling. Thus the issue of need becomes particularly acute when extending existing physical group to online. Members have to realize the virtual space could provide something they could not obtain from local group.

Conclusion

An online community built to sustain an existing group of part-time adult learners withered due to a number of reasons. The fundamental reason should be attributed to the fact that need for community was simply not strong enough. It seems self-evident that an online community should emerge out of members' needs. However, the reality is that many community building efforts are not informed by members' voice. The issue of need becomes especially salient when the online community was built upon an existing local community. The extra time and effort to be spent in cyber space has to been justified by unique benefits of such online community. Members need to be informed of the potential and benefit afforded by web-based tool. In addition, useful online content and facilitator were identified as critical factors that might drive for inhibit their participation. The externally initiated and intentionally formed online community is confronted with the challenges of ownership, goal of community and members' motivation. Our findings have some important implications to online community developers. First and foremost, any community building attempt should start with getting to know members' needs. The community must be built with the purpose to address members' needs. The goal of the online community should be articulated explicitly in mission statement. A dedicated facilitator should designated to maintain engagement level and ensure the quality of information. As a small-scale study, current work has many limitations. Future work will involve a larger-scale investigation into members' needs for and barrier of participation in online community. On the basis of that, more purposeful design efforts could be made to facilitate the process of extending offline to online community.

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