On-line communities
Frank Rennie and Mike Keppell

Background

The term 'virtual communities' has increasingly been applied to communication networks in which the participants focussed on a common topic are not located in the same geographical place, but are distributed across the globe. Unfortunately the term seems to have almost as many definitions and descriptions as the 'traditional' communities of place, and arguments still emerge as to what is and is not an online community. Yet it is important that we have at least a clear working definition, even if we amend or reject this subsequently. We cannot begin to clarify how online communities actually function, nor compare their successes and failures to the operations of a physical 'on-site' community, if we cannot agree what constitutes such a community, and by definition, what does not. This is not as easy as it may seem. The difficulty is that 'community' appears to mean different things to different groups of people, some of whom even deny that there is such a concept, or that it is a useful way of thinking. Though most early work related to the concept of community as a physical territory where residents interact, there was also a contrasting view of community as "an interactional field held together by the human need to interact with other human beings" (Allen, 1993, p.156). Due to the ability to utilise the internet to create abstract places (virtual offices, hybrid libraries, online work spaces, and spaces for peer-to-peer interactive games), representations of the self (online identities), and abstract interactions (with other identities and with automated tasks), (Streibel, 1998) it is this latter view of community which has come to be applied to online social networks. This is perhaps unfortunate, as an increasing number of formal and non-formal online communities are being utilised to sustain some very meaningful and substantial learning support activities for learners in higher education.

Definitions

At the very least then, a community seems to be distinguished by a shared understanding of its boundaries, whether these are geographical, or defined by particular areas of common interest. Given this wide range of understanding, it is important that we should be clear here that we are restricting our discussion to the nature of online communities that are found in the pursuit of higher education, and that we are dealing largely with computer moderated communications. (There is an argument to include mobile phone networks and PDA links etc, but at present this is a tiny percentage of the means by which learners engage with formal higher education). Preece (2000) defined that "an online community consists of:

- "People, who act socially as they strive to satisfy their own needs or perform special roles, such as leading or moderating.
- A shared purpose, such as an interest, need, information exchange, or service that provides a reason for the community.
- Policies, in the form of tacit assumptions, rituals, protocols, rules, and laws that guide people's interactions.
- Computer systems, to support and mediate social interactions and facilitate a sense of togetherness" (p.10)

These common activities help to create a sense of community by providing a common sense of identity, (Bajan, 1998) with which the members of the community can associate

themselves. This growth of trust between members of a community is an important factor in community success, and those common factors that help shape the behaviour of community members become practiced habits that help to construct the norms and identity of the community as a whole. A key point to notice is that the strength of the network is frequently perceived to impart a heightened vitality to the community, and contributes to a strong sense of community identity. This was developed by Gilchrist (2000) who thought that community is both the outcome and the context of informal networking, with the 'well-connected community' being achieved when people feel part of a web of diverse and interlocking relationships.

Lave and Wenger (1991); Wenger (1998) also suggested that more senior members of a community often mentor the novice newcomers until they in turn become expert within the community and continue the self-renewing nature of the community. The concept of legitimate peripheral participation is important to consider particularly when peer learning and peer tutoring is used in courses and subjects where a sense of community is an important part of the learning experience for higher education students.

Findings from research

In studying the evolution of online communities (Preece, 2002) noted two challenges, the first is to focus on developing technologies that are accessible to a wide range of users on a variety of devices. The second is to ensure that the software supports effective social interaction online. In communities of place and online communities, it is important to understand that effective networking is a vital component of community development practice. A key community-building element resulting from social networking is the fostering of trust between the members of the network, partly from sharing stories and partly through being exposed to the stories of participants who seem to be similar to themselves in some ways, but to be different in other ways. The Web has emerged as a new technological vehicle for harvesting the personal experiences of others (Glogoff, 2001) (including peer-to-peer learning) and the construction of tools that attempt to make this collective activity more visible (and accessible) is a major research field (Erickson, Halverson, Kellogg, Laff & Wolf, 2002; Mason & Rennie, 2008). It is clear from numerous studies (Blanchard & Horan, 1998; Rheingold, 2000) that reciprocal support is a vital part of community networks, both online and in a physical location. Other studies have focused upon communities of common-interest groups, such as General (medical) Practitioners to compare similarities and discrepancies between online and face-to-face interactions (Fox & Roberts, 1999). This ability for different aspects of the human personality and individual values to assume different levels of priority in diverse groups of people (communities) is an important driving factor in the growth of online communities. For a number of reasons we would suggest that it is not helpful to continue to refer to the collective operation of groups of people who communicate socially and professionally through electronic media as 'virtual communities'. We would prefer to describe them as **'online interactive networks'**, where people meet online. By emphasising the interactive nature of the online network we are emphasising social-constructivist teaching and learning models of learning. These emphasise peer learning and peer dialogue in order to construct knowledge. For example, the goal may be transformative learning through group projects, obtaining multiple perspectives in problem-based learning scenarios or evaluating online dialogue of other colleagues in online discussion. Blanchard and Horan (1998) identified two types of online communities which they termed physically based virtual community and secondly, virtual communities of interest. In the first type a geographical locality – a university campus, a village, town, or city – develops electronic resources for its users, enabling them to interact and share information in a wider variety of ways. In the

second type the community is normally geographically dispersed, with members participating due to their shared interest in a topic, not because of their shared geographical location.

Implications for practice

While it is true that electronic communications (phone, video-conferences, e-mail, and shared desktops) help to create the illusion of proximity between participants, the scope and depth of online contacts is so wide, from the occasional e-mail inquiry from a friend-of-a-friend, to active many-to-many academic discussion lists, to the detailed collaborative information sharing on groove networks, or other shared work spaces, that it seems foolish and irresponsible to catalogue all online relationships as illusory or superficial. Within higher education the aim is to foster deep learning and engagement through peer learning based on social-constructivist teaching and learning theories of learning.

The classification of online communities was taken further (Marathe, 1999) by a consideration of four principle types based upon the primary motivation of the participants. These can be considered as:

1. **Communities of purpose**, formed by people who are trying to achieve a similar objective, who assist each other by sharing experiences, information, and peer-to-peer knowledge.
2. **Communities of practice**, formed by groups of people sharing a similar profession or vocation who seek to share experiences and facilitate professional exchange (which may also add value to offline networks)
3. **Communities of circumstance**, which are similar to communities of practice but are generally more personally focussed, or related to life experiences, and not driven by professional activities.
4. **Communities of interest**, linking people who share their ideas, passion, and knowledge in a common interest or theme, but might know very little about each other outside this shared interest.

To this we would tentatively add a fifth classification:

5. **Communities of users**, who are represented by the more innovative and interactive business networks that allow customer to customer exchanges, including the sharing of information, reviews, and specific themed discussions.

Further, Marathe (ibid) listed three key criteria that define successful online communities:

1. **Self-generated evolution**, where members of the community generate the content for the site, and take decisions to influence its growth, adaptation, and evolution.
2. **Involvement and interactivity**, through which members participate and interact with other members of the community (e.g. through e-mail, bulletin boards, synchronous chat etc.)
3. **Frequency and duration of visits** that encourage members to come back to the site repeatedly in order to share their motivations with other community members as part of the process of establishing a collective identity and sense of trust between members of the community.

Trust and the common bond

There is a clear indication that the participants in online communities are not attracted to them by the provision of tools alone, but need to be able recognise a common bond with other members of that community. It is this shared set of experiences which provides the potent stimulant of learning opportunities. Increasingly with web 2.0 tools, community is no longer just defined as a physical place, but as a set of relationships where people interact socially for mutual benefit. The diverse range of online spaces in web 2.0 tools such as wikis for collaborative projects, blogs for collaborative reflection and a wider range of communication media such as podcasting and vodcasting may allow a more personal connection to other learners. These learners may prefer more visual, auditory and collaborative spaces to feel connected. Online community is a social network that uses computer support as the basis of communication among members instead of (or in addition to) face-to-face interaction. Many areas of academia have been slow to recognise this, and the fact that (especially younger) students commonly utilise social networking tools to link to "their community" as a non-formal system of peer-to-peer engagement in other aspects of their lifestyle. A key factor would seem to be that these collaborative activities may include small groups of students reading material on different topics; preparing summaries for the rest of the class; online debates; group projects; role-play; collaborative essays; case studies; or group research plans. An important point to recognise is that in the development of this type of interactive network, the community of learners becomes the learning network, as much as the computer-based communications system that supports it.

Success factors

A crucial factor in the success of online communities is the extent to which the level of interactivity of the participants helps to establish network norms, rules, trust, and group identity. Gongla and Rizzuto (2001) identify a five-stage pattern in the evolution of communities, including potential, building, engaged, active, and adaptive. As communities progress through each stage, they increase their capabilities, though progression is not inevitable, and communities can mature or dissolve at any stage. Online communities seem to meet a basic need for many learners, especially those who are debarred from physically co-locating with tutors and/or their fellow learners due to geographical distance, time constraints, and/or other factors such as lifestyle. The ability to access a wide range of learning resources asynchronously, share these with their peers, and test their ideas in a trusted environment, would seem to account for the growing use of online networks, and it is unreasonable to expect that the higher education community cannot benefit from the skills developed in these interactive networks.

Issues and future directions

Although we can consider both communities of place, and communities of shared activity and/or shared belief, there is crucial synergy that develops when a community of purpose is largely located within a single community of place. In view of the vast volume of literature studying online communities and their participants, it is surprising that more has not been done to look at the comparisons of online networks that overlap (or inter-link) with physical communities of place.

Some Potential Issues:

- Access and equity issues for students who are unable to afford the appropriate hardware creating another form of digital divide.
- Ability of the moderator to facilitate and enhance the development of an online community
- Need for more experienced members of the online community to mentor novice newcomers
- Assumed capability of students to be able to use online spaces in an educationally effective way. We need to teach higher education students the skills to use these spaces effectively, respecting other members of the community and developing mutual support for the purposes of learning.
- Rules of engagement for participating in online communities that foster global citizenship, respect for different cultures and empathy for differences in the world environment
- Use of online interactive networks in blended and fully online courses/subjects.
- Designing learning designs for courses and subjects that emphasise the use/need/relevance of online communities
- Developing authentic tasks that are relevant and engaging for fostering online participation
- Examining more learning-oriented assessment tasks in which the assessment task is the learning task within the online interactive network

Conclusions

This short synopsis has emphasised a number of critical issues relating to the functioning of online communities:

1. It is suggested that the concept of community should be regarded as an interactive network of individuals who share common interests and/or a common set of values, and whose members engage in the exchange of personal connections.
2. That the principle of encouraging full and meaningful collaboration between learners and the stimulation of peer-to-peer interaction are key components of situated learning, which can reap substantial benefits through the incorporation of online activities in the learners experience.
3. The development of online interactive networks simply do not work on their own without the assistance of academics/professors in higher education to facilitate and moderate interactions. This facilitation has a specific purpose which may include transformative learning, self-reflection, developing multiple perspectives through collaborative projects and deep understanding of participants from numerous cultures through online dialogue.

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