## Communities in Technology-Enhanced Environments for Learning

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#### INTRODUCTION

The contemporary society addresses complex, interrelated, and interactive global situations to be faced by its citizens. Instead of pursuing solitary actions, this post-modern turn requires its actors to develop capacities to resituate their activities in collective unities and to successfully communicate their actions within these multiple local and global communities. Also in education, the concept of community continues to possess a positive image and the optimistic premises of how communication technologies may enable communities to grow have been widely discussed. For example, in higher education, educational practices (e.g. Virtual University) are more often fixed around Web-based collaborative learning environments, based on the broad frame of computer-supported collaborative learning (CSCL) approach. It is put forward in this chapter that in higher education, technology-enhanced learning communities, if seen as an extension of the idea of Web-based collaborative learning environments, could be welcomed as timely and innovative educational practices — as relevant paths to successful collaborative learning.

#### **BACKGROUND**

Even a limited overview on the research literature on communities reveals that there is apparently no single mutually agreed definition of the term "community" (e.g. Bruhn, 2005; Shumar & Renninger, 2002; van den Besselaar, De Michelis, Preece, & Simone, 2005). In the English language, the basic origin of word "community" is closely related to words "communication" and "common" (Davies & Herbert, 1993), which makes it an adequate term for groups of people with mutual interests and experiences and who communicate

amongst themselves to pursue these interests (Mercer, 2000). Traditionally, people have always been part of local communities where close ties and personal relationships that go beyond casual acknowledgement, bind people together. According to Bruhn (2005), these relationships are closer than casual ones because they are based, for example, on kinship and on common goals and values, which create positive feelings and result, in turn, in reciprocity and commitment. Communities and their members may vary, but community also entails a degree of stability in partnership and belongingness among members. Also, the community itself as a specific social construction may be "the" uniting value (Loewy, 1993). Today, communities also extend beyond particular physical locations and, accordingly, people may simultaneously belong to multiple communities - ranging from technology-enhanced or online encounters to "real-life" interactions. The ways in which technologies enable contemporary communities to grow, may also vary. On the one hand, in online or Internet communities (Burrows & Nettleton, 2002; Preece, 2000) the spatial and temporal resources are entirely symbolic (Shumar & Renninger, 2002) and the membership is based more on individuals' interests rather than on proximity. These online communities are not to be understood as mirror images of locales offline, but might have a potential to increase the sense of belonging and community, normally associated with behaviour in real-life settings (Kolb, 2000).

The boundaries between online communities and physical communities of real-life are, however, often porous making it difficult to conceptualize either form of community as a totally separate unity. Information and communication technologies (ICT) have also been, for example, harnessed to enhance and to support activities of local communities (e.g., Rosson & Carroll, 2005). Local communities are more often distributed over the Web, providing "dislocations" for citizens by new means

of communications and channels of information with regard to their local culture, schooling, political affairs, local administration, and so forth. In this way, these distributed unities are, primarily, purported to enhance the quality of life in the local community (Weare, Loges, & Oztas, 2005). Thus, local communities enhanced by ICT can be distinguished from online communities in the sense that the members of the unity are usually neighbors in the traditional meaning, living in physical proximity and sharing the same material, social, and economic resources. The information character of such a unity is therefore primarily local (Rosson & Carroll, 2005). If these activities are built for the purposes of creating more democratic public spheres — not for the purposes of reducing communal costs — online locales may become an extension to physical ones. In this way, the novel forms of communities might open up new possibilities to citizens to contribute to the "buildingup" of their local community, as well.

Despite the lack of a one single, universally accepted definition or theory of community among the scholars, there are, still, two mutually agreed characteristic lines in this respect: first, definitions that stress the social interactions; and, second, definitions that stress the locale. Community is then seen to offer ideal guiding principles for human relationships as a basis for belonging, stressing here the symbolic meanings of community as "the" uniting value for its members (see, e.g., Mercer, 2000; Sarason, 1974). Also, community is seen through a spatial metaphor as an emotional attachment to "Place" (see, e.g., Casey, 1996; Tuan, 1977). From the many definitions of community that have been offered, this chapter has chosen these two perspectives to serve as broad theoretical vantage points I and II to describe and to experience "community" in a technology-enhanced higher education milieu.

# MAIN FOCUS: COMMUNITIES IN TECHNOLOGY-ENHANCED ENVIRONMENTS

### Vantage Point I: Ideal Guiding Principles for Human Relationships

Sarason (1974) describes symbolic meanings as a sense of community, which refers to a feeling or knowing that members are working together towards a common goal or participating in an activity that depends upon everyone's contribution, while it might be limited even

to a specific task or activity only (Bruhn, 2005). Following McMillan and Chavis (1986), there are basically four aspects of the sense of community identified by scholars: first, a sense of membership; second, a sense of influence; third, integration and fulfilment of needs; and, finally, a shared emotional connection. The sense of membership implies being a part of a collective, while the sense of influence, in turn, is a subjective feeling of the possibility to have an influence on the collective outcome as a member of that collective. The integration and fulfilment of needs highlight the critical role of individual's skills and abilities in regard to the collective outcome. The shared emotional connection means the positive experience of an individual in participating in collective activities and it also implies the acceptance of the other members. According to Sarason (1974), particularly, this experience of being valued by others makes community meaningful in terms of individual members.

Communities do vary, change and "die" as the members and their needs change over time, but as such, the concept also implies a degree of constancy and stability among its members (Bruhn, 2005). Mercer (2000) regards the community and its symbolic meanings, per se, to serve as a uniting value for its members and thereby provides a more "static image" of community. He describes symbolic meanings of community as resources that the community, as a specific entity, offers its members for a shared intellectual activity. These resources refer to joint former experiences (history), to a collective identity based on shared history, knowledge, scope, and experiences of doing things together, to reciprocal obligations and shared intellectual resources and last, to specialized use of language (its discourse) (Mercer, 2000). Mercer (ibid.) argues that fluency in discourse is likely to be one of the most noticeable signs of community membership. In this light, the core of a community may be seen as a process of creating shared and intentional communications rather than as an end as such.

#### Vantage Point II: "Place" and its Particular Mode of Togetherness

In the research literature "community" is also examined through a spatial metaphor of community - as an emotional attachment to "Place". Scholars in architectural and planning literature (see, e.g., Casey, 1996; Tuan, 1977) have long studied communities by means of the

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