Virtual Communities and Collaborative Learning in a Post–Graduate Course

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INTRODUCTION

One of the most interesting phenomenon in knowledge society is the growing of virtual communities (Rheingold, 1993). A virtual community may be transformed into a knowledge community and this at times becomes a good opportunity for continuing professional training.

Stakeholders and educational institutions are currently debating on how to design lifelong learning. The most promising among the proposed solutions, are those that cultivate network learning and communities where learners can actively manage their own learning, cooperating with others through negotiation, with the support of more expert colleagues.

A strategic issue in this framework is that of preparing educators to collaborate in a virtual community. The collaboration process however, entails a number of difficulties and requires careful organization. To be effective it needs to be set up on specific basic requirements such as strong motivation, participation, awareness, capacity to balance, tolerance, and creativity within the group. Moreover, when compared with f2f (face-to-face) groups, a collaborative network group which suffers the mediation of interaction context has to face the problems of social grounding, and requires group cultural development in order to address the issues related to the construction of knowledge.

In this chapter I will discuss some of the main issues arising from online collaboration, through the presentation of a methodological model of a post-graduate course based on online collaboration. The model was developed over the last ten years, and implemented at the Laboratory of Educational Technology (LTE) of the University of Florence, with the aim of promoting effective online collaborative learning groups.

CRITICAL ISSUES FACED BY ONLINE GROUP WORK

The theme of networked collaborative learning has received a lot of attention in these last years (Calvani, 2005; Calvani & Rotta, 1999; Dillenbourg, Baker, Blaye, & O’Malley, 1996; Koschmann, 1996; Roschelle & Teasley, 1995; Scardamalia & Bereiter 1992; Strijbos & Martens, 2001; Trentin, 1998). However, as noted earlier, collaboration is not an easy activity. Studies on face-to-face group work emphasize that there are some widespread preconceived ideas related to the theory and practice of group work (Quaglino, Casagrande, & Castellano, 1992). One of the most common is the belief that it is enough for a group of people sharing a common interest to receive work assignments and to make them necessarily work together. Instead, a group should be considered as a complex entity and a converging point for a variety of needs which can be either individual (security, identity, esteem, self-esteem), or collective (maintenance and reaching an objective, shared memories, sense of belonging), or institutional (obtaining economic and/or moral results, developing innovations and human resources). Good management, therefore represents an adequate response to the complex whole of needs at play.

Emotive dynamics too, play an important role. Group activity may be deviated by particular mental activity with strong emotional connotations. Conflict, for example, in the relational life of groups experience is a clashing between opposite forces which are expressed through antagonism, and cause long or short-term paralysis which take a great deal of energy and time to resolve.

Several dimensions can be distinguished in the life of a group, namely, an “inner” dimension (individual’s myths and emotions), a “real” dimension which refers to what the group effectively does and produces such as interactions and documents; a “representational” dimension as related to cultural and cognitive models.
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which give life (cultural life of the group, models, stereotypes); and finally, a “social” dimension, related to the sense of institutional belonging.

According to Quaglino et al. (1992), a prerequisite for a group to perceive itself as a group, is the development of the sense of belonging to a common entity. This is possible through the promotion and encouragement of interactions, aimed at favoring the sense of cohesion. It is this linking factor which stands at the basis of the birth of a group, characterized by the sharing of rules, and the sentiment of pleasure arising from relating with others, and being sustained and comforted by their presence. An ulterior passage requests reciprocal interdependence, which is the conscious acknowledgement of the other and of the other’s diversity as a resource for the group. The latter must be conceived as an entity within which each person is able to give his/her own contribution and avail of the contributions of others. Interdependence must evolve towards integration between the single needs and the demands of the group, following a particular configuration which facilitates collaboration, and consists of the active participation of the group in a common project.

A great part of group problems are also found on the net, but with some differentiations (Calvani, 2005). The team building process will need some added details keeping in mind the specific features of computer-mediated communication (Bullen, 1998; Feenberg, 1999; Jonassen, 2000; Rourke & Anderson, 2002). A critical element for example, possesses the necessary technological expertise. This may not only represent a preliminary selective factor, but may also condition group dynamics since participants have different capabilities. Those technically advanced can even unconsciously dominate the others. The most vulnerable area however, is that of satisfying the needs of identity and self-esteem. Feedback from online group work participants is delayed since interaction occurs without nonverbal cues (looks, attitudes, gestures) and communication is normally relegated to written messages. As a consequence, the construction of one’s own identity in relationship with “the other” becomes a more difficult process, especially if the participants have very little direct experience with working online. This slows down the team building process and its essential components. Mutual trust, self-esteem, the knowledge of being welcome, mutual understanding, and social grounding are elements that contribute to the construction of a social atmosphere and the “sharing of a group culture”. Online socialization could form part of the same work process but cannot count on direct contact. It can therefore produce a sociality vacuum. It may then be necessary to dedicate specific moments to preliminary online socialization.

The types of mediums used, also hold an influence in many other ways. If on one hand these mediums free communication from the bond of spatial-temporal presence and amplify relational potentials, on the other they also cause dispersive and fragmented communication. Not being able to directly see the effects of our own actions reflected on the face of the person we are speaking to entails greater communication difficulties, above all in the quantity and pertinence of the messages. This may favor a fragmented dialogue or other undesired phenomenon like stress, soliloquy, “duets”, or quarreling.

**THE LTE POST-GRADUATE COURSE**

The LTE at the University of Florence has been delivering post-graduate online courses on “Methods and Techniques for Network Collaboration” since 1998. The course lasts five months and provides blended learning, including three f2f meetings. Those registered usually number around 150 people, and are mainly teachers still in service.

Along the years, innovative elements have been introduced on the methodological and technological level with the aim of facilitating collaborative exchange. My following presentation of the general outline of the course will include the methodological and technological devices recently introduced to facilitate and improve collaborative work, facing the critical issues noted earlier.

**The Course’s Structure**

The course is based on a five-phased model which is partially similar to the Salmon’s Five-Step Model (2000). It gradually proceeds from individual study to sharing and collaboration/cooperation.

**Phase 1 – Technological familiarization (1 month):**

The aim of the first phase is to verify if the single participants are able to use online communication tools and know the netiquette rules, and to allow them to explore the functionalities of the virtual learning environment.
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