

Computer–Mediated Communication Learning Environments: The Social Dimension



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INTRODUCTION

The social, relational, and affective dynamics are receiving more and more attention in the study of learning processes, as cognitive, affective, and emotional dimensions of learning seem to be closely related. This kind of co-origination, borne out in the context of neurosciences, artificial intelligence, cognitive psychology, and education, has also been recognized in the field of Web-based learning. The research framework of computer supported collaborative learning (CSCL) has emphasized the role that a well-established social dimension plays in collaborative learning and group-based working within communities of learners. According to the socioconstructivist model, learning always implies a social dialogical process where individuals are mutually engaged in the construction and sharing of new knowledge (Scardamalia & Bereiter, 1994; Wenger, 1998). Pedagogical approaches based on these assumptions combine the advantages of a learning strategy that promotes deeper level learning, critical thinking, and shared understanding with those related to the development of social and communication skills (Garrison & Anderson, 2003).

What characterizes the intertwining of the educational and sociopsychological dimensions in these settings is that they are strictly linked to the dialogues that participants mutually construct. Most of the learning experiences that occur on the Internet are characterized by written and asynchronous communication (Lapadat, 2002). And the written discourse deeply influences also the socio-affective dimension of learning.

The present review aims at presenting the most recent and promising research studies that tackle the linguistic nature of the emotional and affective dimension of learning in Web-based learning environments. Its purpose is to emphasize how computer-mediated communication (CMC) may convey specific social affordances in the expression of affective and social domain of learning.

BACKGROUND

Early approaches in the study of CMC noted that the lack of nonverbal cues (e.g., facial expression, posture, gesture, proximity) would limit the richness and scope of communication (Short, Williams, & Christie, 1976). CMC was thought to be an impoverished means of communication giving little chance to gather important information about the context, the commonly shared rules of conduct and their influence on communication, all of which foster uninhibited speech and flaming. Moreover, as anonymity, which is a frequent feature of online interactions, reduces these control indicators, communication would be more de-individualized and de-personalized, and that would have different and unpredictable consequences on the various speech contexts. Lacking nonverbal indicators, CMC was seen to be characterized by a very low level of social presence, and it was thought that this feature could invalidate the learning purpose.

In recent times, a number of studies have shown that with written communication alone, typically used in chat and e-mail, it is possible to stimulate social and affective presence, provided that interlocutors are allowed to manage their time freely. Other authors underlined the similarity between the development of relationships in both face-to-face and online contexts, showing that although the latter need more time to grow, they can be more socially oriented than the former (Walther, 1996). Users compensate for the communicative lack of written discourse with linguistic inventions and adaptations (e.g., emoticons, typographical marks, and other textual features, including the use of capital letters, ellipses, exclamation marks, as well as typing errors) in order to express with appropriate orthographical strategies the aspects of nonverbal communication (Crystal, 2001). In this way, a higher degree of familiarity and intimacy in content, style, structures, and timing of the exchanged postings would not only be a linguistic adaptation able to incorporate colloquial and informal registers, but it

could also strike a balance between the features of the medium and an acceptable level of immediacy.

In the context of distance learning, social presence has been recently redefined as “the ability of participants in a community of inquiry to project themselves socially and emotionally, as ‘real’ people (i.e., their full personality), through the medium of communication being used” (Garrison, Anderson, & Archer, 1999, p. 94). According to this reformulation, social presence seems to support cognitive objectives as it encourages and supports meaningful critical thinking processes in a community of learners. Emotion arousal influences the cognitive, metacognitive, and motivational aspects of the learning process, especially when socially oriented (Wosnitza & Volet, 2005) and affective objectives that result in engaging and rewarding group interactions may lead to an increase in academic, social, and institutional integration and results (Rourke, Anderson, Garrison, & Archer, 1999).

The studies that have adopted this new conceptual perspective have investigated social presence, among other characteristics, as a predictor of satisfaction and perceived learning (Richardson & Swan, 2003) and as an indicator of success and quality of the learning experience (Swan & Shih, 2005). Others underline the relationship between the role of the tutor/instructor and the affective and cognitive learning in the online classroom (Baker, 2004). All of them focus on the fundamental connection between the cognitive and affective elements of learning processes.

THE LINGUISTIC EXPRESSION OF THE SOCIAL DIMENSION OF LEARNING

If traditional approaches to measuring social presence and the affective dimension of learning used different combinations of survey instruments (e.g., scale-graduated questionnaires and semistructured or unstructured interviews) and analyses of students’ online interactions through quantitative methods (e.g., frequency of messages, etc.), in recent times, the expression of the social dimension has been investigated through other means. Since the pioneering work of Henri (1992), the content analysis approach has become one of the most valuable ones. Classifications of text features into categories and indicators have been proposed, with the aim of capturing the new styles and characteristics of

human communication which rely on asynchronous written discourse.

There are a number of ways in which textual indicators are able to manifest social presence and express representation of learners’ affective domain. Rourke et al. (1999), for instance, identified 12 indicators of social presence belonging to three categories (affective, interactive, and cohesive), based on previous research, literature, and analysis of transcripts, which were applied to transcripts of online communication. To these, Swan and Shih (2005) added new indicators that match quite well with the ones derived both from face-to-face analysis and research on previous online learning.

Job-Sluder and Barab (2004) examined how participants in a community of practice express a shared group identity in their discussions on the basis of the use and frequency of singular and plural first person pronouns; the aim of the study was to investigate the role of identity formation in learning processes in the context of preservice and in-service teacher development. Inductive methodology guided the approach of a research study that proposes a model of engagement able to capture the dynamic nature of learners’ interaction by means of the philosophical hermeneutic circle (Ziegler, Paulus, & Woodside, 2006). These studies have contributed to emphasize the importance that linguistic specificities of written communication have in the expression of social presence and affective dimension of learning. Linguistic creativity is indeed what distinguishes writing in CMC settings from written language in other kinds of communicative contexts (Crystal, 2001). Yet, the examination of specific features of language in creating an effective climate of social presence has not been carried out adequately.

Only in recent times, for instance, the role that metaphors and figurative language in facilitating the expression of emotions and affective domain in Web-based learning environments has been investigated. Literature in linguistics and cognitive science state that metaphoric language has a central role in every day discourse, because it seems to shape the ways in which we think, creating a bridge from abstract domains to perceptual experience and helping to understand a new domain of experience in terms of what is already familiar. Moreover, figurative language has a central role in establishing a climate of closer intimacy between speakers, as the power of imagery seems to facilitate the sharing of personal experience and to create emotional

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