Telepedagogy: understanding collaborative telelearning through semiotic configurations

Milton Campos
Telelearning/NCE, Sao Paulo State University

Abstract:

Computer mediated collaborative education brings new possibilities and also difficulties to the process of teaching and learning. Some of those new possibilities are having a broader world of information at reach and taking advantage of written accounts of peers about different subjects to provide us feedback to our own contributions. Some difficulties are not having physical contact with our peers and knowing just from what they write as an audio/video complementation of telelearning is still a promise. As collaborative education supposes a constructive interactive relationship between peers, and interaction means exchange of experiences, ideas and beliefs, it seems that a new approach to communication is important to understand computer mediated education and indicate ways to boost its possibilities and to make a positive use of its difficulties.

Communication science seeks to understand the production, processing and effects of symbolic systems and explain the phenomena associated with them (Berger and Chaffee, 1987, p.17). A constructivist approach to communication science implies: a) the impossibility of discussing production, processing and effects isolated one from the others, b) that "symbolic systems" cannot be understood separately from the subjects, groups and/or societies that produce them, process them and produce effects on them as they are dynamic resulting semiotic configurations intrinsically connected to their experiences and history, and c) that semiotic configurations are always permanently being constructed one upon each other in such a way that they always share a part of the virtual representational space and reconstruct it, consistent with the idea of "schematisation", the communication exchange situation (Grize, 1990).

Semiotic configurations are dynamic and fluid virtual representations of subjects, groups and societies mental structures that carry meanings produced from perceptions and symbolic objects (such as natural language, logic, a movie, a computer software) through the mental process of meaning implication. Meaning implication is the inferential transfer of meanings. The resulting fluid intersection of various semiotic configurations is always unique, changes uninterruptedly and is the site of symbolic interaction, of communication. Communication is a socio-psycho-biological evolutionary mechanism that propitiates the exchange of meanings through and by the dynamics of working semiotic configurations (Campos, 1996). The use of the term "semiotic" has nothing to do with Peircean semiotics but is originated in the concept of "semiotic function" that indicates the moment in the life of the child in which she/he becomes capable of entering in the world of language (Piaget, 1976).

Telepedagogy is the evolutionary and developmental study of educational interaction through computers, consistent with the communication theory of semiotic configurations. It applies for explaining teaching and learning computer mediated processes and also providing methods and techniques for notional as well conceptual collaborative knowledge building. Transcript analysis assessing conditional reasoning through the flow of meaning implications in on-line discourses of two Virtual-U V-Groups human science courses taught at Simon Fraser University, BC, Canada, suggest that telepedagogy is useful for formulating transcript evaluation techniques and tools for knowledge building in asynchronous learning environments.