IT IS ALL ABOUT LEARNING!

Most papers and articles on computer-supported collaborative learning start with a description of the theoretical framework used. In a well-established research paradigm this would be a formal aspect of any research report, but in CSCL, however, this is a *conditio sine qua non*. At present there is still no unified theoretical framework that captures all the different aspect of the topic under study.

Constructivist, cognitivist or activity theory perspectives guide research and practice on learning and collaboration. While there is little doubt that CSCL is foremost about learning, considerably less attention has gone out to the relationship between a *theoretical framework* and the *educational design* of a CSCL setting. At present, a systematic approach to the design of CSCL environments is missing. Design of a CSCL setting is often based on subjective decisions regarding tasks, pedagogy and technology, or concepts such as ‘cooperative learning’ and ‘collaborative learning’.

Chapter 1 focuses specifically on the relationship between theory and educational design, in particular with respect to higher education. Multiple collaborative environments exist simultaneously - each with its own merits - indicating a clear need to assist both researchers and practitioners in the design of a CSCL setting that achieves their educational goal(s). Kirschner, Martens and Strijbos propose a framework for designing CSCL settings - based on a probabilistic approach to design (versus causal) - focusing on educational, technological and social affordances of a CSCL environment. Prototypical design questions are provided to stimulate both practitioners and researchers to adopt a more systematic approach to their design of CSCL environments.

In addition to the relationship between theory and educational design of CSCL, research orientations and research practices are determined by the theoretical framework as well. In Chapter 2 Lipponen, Hakkarainen and Paavola illustrate that the research orientation and practice both reside on the theoretical framework for *learning* - acquisition, participation or knowledge creation - adopted by a researcher or a practitioner. This framework comprises the primary goal of collaboration: internalisation (individual knowledge gain), interaction (sharing expertise and distributed expertise) or transformation (continuous advancement of shared knowledge) and has also important consequences for the theoretical foundation, the educational focus, the view on collaboration, function of technology and methodology used to study CSCL.

Both chapters illustrate that designing a CSCL environment is not just a matter of taking a technological tool, an instructional approach supporting collaboration and an approach to studying its effects and putting them all together. All of the components are interrelated. Design of a CSCL environment, as well as the study of collaboration, is firmly grounded in the theoretical framework that is adopted by the researcher practitioner and the theoretical framework for learning, thus that learning (goals) is the starting point for designing a CSCL environment.