Chapter VI

Mapping Perceived Socio-Emotive Quality of Small-Group Functioning

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Abstract

This chapter demonstrates the influence of the socio-emotional quality of small-group functioning in a collaborative learning setting. It reports a case study from a sophomore class at a Belgian university. The subjects were 142 undergraduates subdivided into 12 project groups of about 12 students each. Following a description of the collaborative learning setting, a longitudinal survey study focusing upon the evolution of the learners’ perception of their own group’s socio-emotional functioning is presented. The aims of the study were to map group members’ perception of the socio-emotive quality of their own group functioning and to examine if and how problems in groups
of learners can be detected as soon as possible. Having demonstrated that dysfunctionalities within groups can be detected rather early, the authors hope that corrective interventions can be implemented when they can still have an effect.

**Introduction**

Students who collaborate in small groups on a common research project have abundant opportunities to present and discuss ideas and to plan, organize, and carry out activities related to the task at hand. Several authors attribute a long list of potential benefits to the richness and the diversity of these learner activities. Because a collaborative learning environment actively involves students in the learning process, educational theorists believe that collaborative settings such as small project groups of co-learners are an effective means of learning, and they therefore play an important role in knowledge construction (Blumenfeld, Marx, Soloway, & Krajcik, 1996; Collins, Brown, & Newman, 1989). By expressing ideas into words, by formulating opinions, by externalizing tacit knowledge, attitudes, approaches, values, and perspectives, learners are expected to explore their own understanding in more detail (Johnson, 1971, 1974), to generate more and better questions (Panitz, no date) and to develop higher level thinking skills (Johnson, 1971; Vygotsky, 1978). It is hoped that vague mental conceptualizations of an idea become internalized into more concrete representations (Resnick, Levine, & Teasley, 1991) resulting in a long-lasting, firmly rooted understanding (Kulik & Kulik, 1979).

Because cognitive activities of learners become visible during group work, these activities also become subject to intervention and coaching. Hence, the externalized ideas of the learner provide a means for other learners and their teachers to react to, negotiate around, and build upon what they heard from the learner’s side (Arias, Eden, Fischer, Gorman, & Scharff, 1999). Consequently, the conceptualizations of co-learners will gradually become fine-tuned and a common language and a common understanding -or a “shared knowledge”- will be created (Scardamalia & Bereiter, 1994). Important as they are, the cognitive benefits listed above are but a small portion of the advantages attributed to collaborative learning. Panitz (no date), for example, presents a referenced list of 67 theoretical advantages of collaborative learning, ranging from academic over social to psychological and assessment benefits. Not unimportantly, some of the cognitive benefits believed to be associated with collaborative learning have already received direct empirical support. To illustrate, two recent reviews are positive with regard to the effectiveness of various forms of small-group learning. Springer, Stanne, and Donovan (1999) conclude that small-group learning is successful in promoting greater academic achievement and more favorable attitudes toward learning. According to the authors, these results are superior to most findings in comparable reviews of research on other educational innovations. Comparing small-group and individual learning in a context in which students learn to use computer technology, Lou, Abrami, and d’Apollonia (2001) found significant positive effects of small-group learning on student individual achievement, task performance, and several process and affective outcomes. In view of the overwhelming number of theoretical arguments and of the empirical support for the cognitive benefits associated with collaborative learning, it
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