Chapter VII

Computer-Supported Collaborative Learning:
The Role of the Instructor

Kara L. Orvis*
The Consortium of Universities of the D. C. Metro Area,
U. S. Army Research Institute, USA

Andrea L. R. Lassiter*
Minnesota State University - Mankato, USA

Abstract

In collaborative learning, interaction among learners is essential for effective knowledge acquisition and increased understanding. Computer Supported Collaborative Learning (CSCL) environments often inhibit or cause problems with learner-learner interactions. This chapter takes an applied perspective of what the instructor can do to identify and manage learner-learner relationships in a CSCL environment. Using a model of virtual team effectiveness, we identify potential motivational, cognitive,
and affective problems between learners that are often exacerbated by computer-mediated technologies. Recommendations for instructor interventions designed to promote effective learner interactions are offered. This information will provide insight to both corporate trainers and K-12 educators on how instructors can promote appropriate and positive learner-learner interaction in CSCL environments.

Introduction

Computer-supported collaborative learning (CSCL) allows group learning to take place in computer-mediated environments. To receive the full benefit of social learning, collaborative learners must interact with each other, share information, and coordinate actions. Unfortunately, research has indicated that computer mediation contributes to potential barriers to learner-learner interaction. Specifically, members of computer-mediated teams tend to experience slower development of trust, cohesion, efficacy, and shared cognition, all of which impact whether learners interact effectively. A concern for instructional developers and designers is how to foster effective learner-learner interactions in CSCL environments.

This chapter proposes that instructors have the ability to influence and promote effective learner-learner interactions by identifying problems and stepping in to facilitate their processes. However, most CSCL course developers and instructors have not focused on the instructor’s role of promoting learner-learner interaction. Rather, attention has been paid to the choice of technologies used to support this interaction, even though research on virtual teams has found that a leader is able to influence the processes (e.g., coordination and information sharing) and relationships (e.g., cohesion, efficacy, and trust) between team members (Zaccaro, Ardison, & Orvis, 2004; Orvis, 2004). This chapter will incorporate virtual team and CSCL research to focus on the role of the CSCL instructor as a promoter, facilitator, and manager of positive learner-learner relationships and interactions.

The specific objectives of this chapter will be to:

• Describe the importance of learner-learner interactions in collaborative learning environments