Chapter 3.15
Virtual Teams in the Traditional Classroom:
Lessons on New Communication Technologies and Training

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ABSTRACT

This chapter examines the technologies available to virtual teams and issues associated with training virtual teams. We first evaluate the benefits and limitations of technologies to aid communication and collaboration. We consider the merits and limitations of asynchronous and synchronous discussion tools, groupware and collaboration tools, and electronic meeting systems. We then offer three different levels of training possible for virtual teams and discuss some key issues associated with training. Each level of training varies in intensity and is dependent upon the nature of the assignment and team objectives. The chapter concludes with some predictions and recommendations about the future of new technologies and virtual teams in the educational setting. Throughout the chapter, special considerations are made for those virtual teams operating in the traditional classroom.

INTRODUCTION

During the past 20 years, team-based movements have enjoyed considerable popularity in educational settings and organizations throughout the country. LaFasto and Larson (2001) suggest that most of us are "…well past the point of needing convincing that collaborative teamwork is an effective tool for managing complex tasks in a rapidly changing environment" (p. xvii). In the past few years, however, the nature of teams and teamwork has begun to change. Pauleen (2004) explains that "growing concern with globalization,

the rise of the knowledge worker, the need for innovation, and the increasing use of information and communication technology" have resulted in a new form of "virtual" teams (p. viii). As organizations move increasingly toward such teams, it becomes essential to provide students with experiences working in a virtual environment.

The purpose of this chapter is to examine the role of new communication technologies in virtual teams in the educational setting. In particular, we examine the breadth of technologies available to students in virtual teams, consider the importance of technology-based and general training for team members, and speculate about the future of virtual teams and technologies to support them in an educational setting. Throughout the chapter we draw heavily on our own experience as instructors actively using different types of virtual teams in three college courses we teach — paying special attention to practical implications/lessons for the use of virtual teams in the traditional classroom. To begin, we first briefly address the importance of virtual teams in educational settings and provide some background about our use of virtual teams.

BACKGROUND: VIRTUAL TEAMS IN THE TRADITIONAL CLASSROOM

Scholarly writing related to virtual teams in the classroom tends to come in two broad forms. First, there is the research literature — on both teams of students assembled purely for research study purposes (e.g., see Chidambaram, 1996; Ocker & Morand, 2002) as well as teams that appear more integrated into actual classrooms (e.g., see Aubert & Kelsey, 2003; Jarvenpaa, Knoll, & Leidner, 1998; Jarvenpaa & Leidner, 1999; Kayworth & Leidner, 2002; Warkentin & Beranek, 1999) — where the use of virtual student teams for learning purposes is secondary to broader goals of studying virtual teams more generally. Second, the role of virtual teams can also be seen

in work on education and learning. As one group of scholars explain, "In the expanding market of virtual universities and online degree programs, virtual learning teams are being used to increase collaboration, communication, and ultimately student learning" (Johnson, Chanidprapa, Yoon, Berrett, & La Fleur, 2002, p. 381). As we will show in this chapter, virtual teams also have a place in more traditional university classrooms to help facilitate learning. This interest in virtual student teams is captured in part by the work on computer-supported collaborative learning, or CSCL. Brandon and Hollingshead (1999) suggest CSCL "seeks to combine classroom-based collaborative learning theory with theory and research on CMC in order to provide a foundation for understanding how CMC-based group projects can enhance learning" (p. 110).

Our focus builds on work related to both research about virtual teams in organizations and CSCL that utilizes teams to facilitate learning. However, we also wish to emphasize a more pragmatic and experiential purpose for using virtual teams: many students will likely find themselves working in and being members of virtual teams in the future, so it is important to provide them with educational experiences related to this in the classroom. We believe virtual teams should be used in traditional and virtual classrooms to teach students to be effective and responsible organizational members and to help meet the increasing demand for communicatively competent virtual workers.

For educators, the increased use of virtual teams creates a new set of responsibilities and issues that must be considered. Thus, in this chapter we focus on the types of communication technologies and training useful for virtual student teams so that they will be better prepared to work and interact on such teams beyond the classroom as well. Considering this goal, we make several basic assumptions about the role of technology and training to support virtual teams in traditional classrooms.

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