

# Exploring the Middle Ground: A Course on Teaming in Cyberspace

by Joel Foreman, Stephen Ruth and Ted Tschudy

We recently taught *Leveraging Information Technology: Management of Dispersed Teams*, a course about teamwork among dispersed work groups (cyberteams). In developing and teaching this course, which also is known as Teaming in Cyberspace (TIC), we learned a great deal about the process of establishing trusting relationships among ourselves, with students, and with technology. TIC is an elective for students in the master's of business administration (MBA) program at George Mason University (GMU). Traditional MBA courses meet 14 times over a four-month semester; our course, however, met formally only 4 times during the 1999 spring semester (mid-January to mid-May).

It seems fitting to have a course about teaming in cyberspace take place outside the classroom, almost exclusively in students' homes or offices. But when students meet in person only four times, an important question must be answered: What experiences do students receive outside of class that substitute for ten class sessions (roughly 30 hours of face time)? In place of in-class interaction, we substituted a combination of TV lectures; audiocassette lectures about the history of teamwork; extensive, reflective writing assignments on the teamwork process; self-paced learning exercises; linkages with **Sun Microsystems**, one of the best known teaming practitioners; and an online conference sponsored by **Caucus Systems**.

Although there is an emerging debate about the effectiveness of distance courses compared to traditionally taught classes (see, for example, Phipps & Merisotis, 1999, and Brown & Wack, 1999), it is our feeling that this debate ignores much of the constructive action taking place in higher education. We taught the TIC course in the middle ground between high-tech (technology-mediated instruction) and high-touch (formal classroom instruction). Our replicable approach capitalizes on the abundant literature about virtual teams *and* fosters extensive student interaction with the real world, where Internet-connected teams must be able to deliver work products every day. In this article, we offer evidence that students can benefit from and enjoy the right mix of face time and technology interventions in the classroom.

## The Course Components

The TIC course had four components, each managed and graded by a different faculty team member. (Of the four instructors, only Stephen Ruth has an appointment in the GMU School of Management, the course sponsor.) The first segment, managed by Ruth and called "Intellectual Territory," required the students to become familiar with the significant theoretical and practical literature on teams and dispersed work groups. In addition to reading the required text and articles, students viewed four 1-hour lectures on the university TV station. (The lectures were accessible from the the students' homes or offices or at the university library.) Ted Tschudy, an organizational consultant and member of the TIC faculty team, developed a fifth lecture and made it available on audiocassette with accompanying textual material. Students were required to complete five short discovery projects based on the lectures and readings; the projects counted for 30% of the course grade.

The second and most challenging component of the course was a series of exercises for virtual teams. This section covered seven weeks of the course and was managed by Joel Foreman, an English professor who previously had developed and taught a university course called **The Virtual Organization**. In that course, Foreman established practical exercises that enabled seven work groups to experience a wide range of virtual processes, from phone conferences to asynchronous discussions via email. Foreman adapted those exercises for the TIC course, in which the first week's assignment—establishing telephone conferences—helped students learn how to work at a distance, develop a project management plan, and coordinate the following week's work. In the second week, the teams met online for a team-building exercise in a simulated environment known as **Club Connect**. There, students—who were represented in this "simworld" by onscreen cartoon figures (avatars) that can move, gesticulate, and chat with others—used their complementary competencies and troubleshooting skills to complete a challenging team mission. In the process, they learned what they could expect from each other and continued the team bonding initiated the previous week.

In subsequent weeks, the teams employed e-mail, telephone conferences, and an asynchronous discussion database to research and write a business plan for an Internet start-up company. Developing the plans effectively obliged students to use the virtual tools and teaming techniques that they had learned in previous practice exercises. During the last month of the course, students were required to use those same teaming techniques to write a research paper on a business-related topic of their own choosing.

The third segment of the course took place throughout Foreman's practice exercises. Once a week, every student posted a learning report to a Town Hall chat room reserved for his/her specific team. These individual reflections included observations about critical events in each team's development (often in the context of team development frameworks introduced in the course), team roles, the team process, and the unique challenges and opportunities associated with teaming in cyberspace. Tschudy read and posted responses to each report. Many of the students, unfamiliar with the concept of "process" as it relates to teams, initially found these required learning reports bothersome. However, many, if not most, learned to use this reflective process actively and constructively as the semester progressed.

The fourth part of the course provided interested students with access to a major online conference dedicated to knowledge management, arguably one of the most significant new Information Technology disciplines. Caucus Systems, an organization in Northern Virginia, presented **Knowledge in Action** in March 1999 to employees of Global 1000 corporations. Dr. Lisa Kimball—the conference manager and a TIC faculty team member—invited members of the TIC class to be active conference facilitators, to develop summaries of their dealings with conference participants and presenters, and to link conference speakers to individuals with questions. All who participated (about half of the class) felt that the conference was a positive course experience.

### **Course Evaluations**

Student evaluations were generally positive, particularly for a new elective course. Responses to the question "Overall, I rate the teaching of this course as . . ." averaged 4.35 on a 5-point scale. Evaluations of the instructors' preparation, the intellectual rigor of the course, and other related categories also received approximately the same score. Four students rated the organization of the course as "marginal" and were critical of the four-instructor approach; one student said the team teaching was "somewhat confusing." Surprisingly, none of the students were critical of the lack of face time. Even those who were unsatisfied with the course's organization apparently felt that the amount of time with the instructors—whether face-to-face, on e-mail, in chat rooms, or on TV or audiocassette—was sufficient.

### **Insights and Future Plans**

Since TIC is about teaming on the Internet, it is a better candidate for distance instruction than other courses, in which students often need far more face time than

we provided. The subject allowed us, however, to offer high-tech, low-touch instruction. As Ruth discovered while teaching a course in management information systems a few years ago, most students are willing to trade some hours in class for distance learning—that is, if the exchange involves good content and a guarantee that the instructors are as near as an e-mail message or a phone call (Ruth, 1997). From a teaching perspective, we found that we teamed well—perhaps better than we would have in a no-tech, high-touch course. Because we had relatively little face time together to plan and run the course, we had to practice what we preached and communicate extensively by e-mail and telephone.

When this course is offered again, we undoubtedly will modify it. We have considered having only one instructor oversee learning tasks, cutting down on the variety of activities offered, and simplifying the work assignments. These changes would make the course more focused for students and facilitate the introduction of new faculty into the teaching team. We are certain, however, that the amount of face-to-face instruction need not be increased if technology-based interaction continues to give students the right mix of content and mentoring.

The technologies that we employed are available at almost all universities and junior colleges. We encourage instructors to use them in courses that will add to the body of practice on education in the middle ground—somewhere between learning only in a classroom and learning only at a distance—where most of the important pedagogical innovations are quietly taking place.

## References

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