At least five different types of literature cover Internet-enabled distance education, including specialized research literature (such as the *Journal of Asynchronous Learning*, the *American Journal of Distance Education*, and research monographs); practitioner literature, whose audience is administrators and faculty (for example, the *Chronicle of Higher Education*); instructional materials for students taking specific courses (such as syllabi and orientation documents); popular accounts of such courses written for the public; and marketing descriptions of courses and degree programs.

Most of this diverse literature emphasizes the likely value of Internet-enabled distance education for reaching new students, generating new revenues, increasing convenience, and possibly enriching educational experiences. Some of the specialty research studies have examined the difficulties faced by instructors in developing and teaching these courses, or the problems reported by the students taking them. However, the majority of practitioner and popular articles tend to emphasize the virtues of distance education. Some of the specialty research studies have examined the difficulties faced by instructors in developing and teaching these courses, or the problems reported by the students taking them. However, the majority of practitioner and popular articles tend to emphasize the virtues of distance education. Such articles frequently minimize the difficulties involved in providing high-quality distance education courses or in having students learn from them.

The intent of our study was to increase understanding of the social process in such courses and of students' actual experiences in an Internet-enabled course. The study article discussed a qualitative case study of a small, graduate-level, Web-based distance education course at a major U.S. university. We used vivid ethnographic data, which included three methodological observations of relevant activities, such as classroom discussions, students' interactions with the course Web site, and a "field trip" to a virtual university; interviews and informal conversations with students and the instructor; and document review, including the course syllabus and reading assignments. We did not rely exclusively on electronic postings such as e-mail. For example, we interviewed and observed one student in her home when she participated in a "virtual field trip." Comparison of the information collected from the various sources helped to validate the data. The multiple data sources allowed for an increased understanding of students' actual experiences with and emotional reactions to this course.

Although some prior studies have cited isolation as a major problem in distance education classes, we did not find this to be of much concern to the students in this course. However, the recurrent experience of other types of distress, such as frustration, anxiety, and confusion, seemed pervasive. Further, the level of student distress we found in this study significantly exceeded our expectations.

From our interviews and observations, we found two foci of student distress: technological problems and communications. Students without access to technical support were especially frustrated, but the instructor's practices in managing her communications with students also produced stress in students. Students reported confusion, anxiety, and frustration due to the perceived lack of prompt or clear feedback from the instructor, and from ambiguous instructions on the course Web site and in e-mail messages from the instructor. The instructor did not appreciate the duration or extent of the students' distress, believing that she had effectively eliminated their anxieties and frustrations earlier in the term.
Part of the reason for the instructor’s misconception resulted from the students’ reluctance to express their continuing distress to the instructor. The power differential between students and instructors in university courses probably influenced their relative silence. We also suspect that these difficulties were exacerbated by the weaker social cues found in asynchronous, text-based communication compared to face-to-face communications. Participants have to communicate overtly to create social presence online, whereas silent students’ facial expressions and body language can communicate feelings in a face-to-face class.

Based on our results, we caution against emphasizing only the virtues of computer-mediated distance education, as is done in most articles written for practitioners and the public. In some of the earlier upbeat studies, students may not have had opportunities to express their confusion and anxiety with Web-based distance education. Data collected solely from course evaluations or students’ e-mail might be skewed, as students might make more positive statements about the courses because of the relief of finishing the courses and concerns about upsetting the instructor. Thus, we recommend that future research on the topic of students’ experiences of distance education use a multi-source methodology similar to the one employed here.

Some readers have suggested that the students’ distress was unique to the awkwardness of this particular instructor. This would be an inappropriate assessment of our findings, since this instructor was as qualified as many others who currently teach distance education courses. However, our reading of the literature written for instructors and students in distance education courses leads us to conclude that they are rarely given clear guidance about important aspects of online communication. Little literature offers instructors concrete and specific guidance on teaching such a course, although this literature is slowly improving. Further, students may not be well prepared for such courses (for example, they may not have appropriate expectations). We hope our study stimulates the demand for further work on distance education that examines the likely complications and challenges, as well as vivid case examples of how instructors and students have made their courses more (or less) workable.

The full study is available in Information, Communication, and Society, 3 (4), 2000, 557–579 and online at <http://www.slis.indiana.edu/CSI/wp00-01.html>.

Noriko Hara (nhara@alumni.indiana.edu) is a postdoctoral research fellow at the NSF Science and Technology Center at the University of North Carolina at Chapel Hill. Rob Kling (kling@indiana.edu) is a professor of Information Science and Information Systems and Director of the Center for Social Informatics at Indiana University in Bloomington, Indiana.