Videoconferencing for Supervision of Graduate Students

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VIDEOCONFERENCING FOR SUPERVISION OF GRADUATE STUDENTS

This article describes the use of two-way videoconferencing for providing live clinical supervision of graduate students. It includes the rationale and description of a method of supervision as it has been implemented within a distance education program. The reader is provided with research findings and implications for policymaking within institutions of higher education and professional organizations overseeing the clinical training of future professionals.

BACKGROUND

Many fields of professional study rely on supervision of graduate students as part of the clinical training experience. Bernard and Goodyear (1992) define supervision as a "means of transmitting the skills, knowledge, and attitudes of a particular profession" (p.2). Various state licensing and credentialing agencies such as the Academy of Certified Social Workers (ACSW), the American Board of Professional Psychology (APA), the Council for the Accreditation of Counseling and Related Educational Programs (CACREP), and the American Speech Language and Hearing Association (ASHA) require clinical training under the supervision of accredited and licensed professionals.

The supervisory process, as part of a professional training program, is susceptible to the same influences that shape the academic programs in which they operate. Some of the influences impacting programs within higher education include decreasing federal and state funding, increasing demands for demonstrated effectiveness, and a call for diversity among students (Carnevale & Frye, 2003). Furthermore, Busacco (2001) contends that "digital technologies are presenting new opportunities—such as distance education—for institutions of higher education to offer postsecondary education to a more diverse population of students" (p. 4). With an increase in non-traditional students participating in a greater number of distance education programs, there is a corresponding need to place students in clinical settings at distances from the university. The time and financial resources required to provide supervision to students at these distant sites are substantial.

Such challenges come at a time when higher education is undergoing a period of "unprecedented change, with shifts in how institutions are funded, public demand for accountability and demand for instructional technology" (Miller, 2000). As a result, institutions are taking a closer look at how money is being spent and demanding proof of positive learning outcomes. Time spent identifying off-campus training sites and traveling to supervise students engaged in such experiences may be viewed as non-productive and a drain on already limited operating budgets (Dudding, 2004).

These challenges invite a deeper look into what distance education technologies, specifically videoconferencing over IP, can do in the area of supervision of graduate students.

VIDEOCONFERENCING FOR SUPERVISION

The use of videoconferencing for supervision of graduate students may be most appropriate in the context of a distance education program. Characteristically, students participating in distance education programs are located at a distance from the educational institution. For graduate programs requiring clinical training, student placement and supervision at such distances may become a burden for the student and the institution. As mentioned earlier, this places increased demands on the financial and personnel resources at the universities.

The use of videoconferencing for supervision currently employed at the University of Virginia was developed specifically to meet the needs of graduate students enrolled in a distance education master's degree program. The students were enrolled part-time in the speech-language pathology program while maintaining full-time employment. The students received their academic training through courses delivered by videoconferencing from the university campus to a satellite location. The clinical training component was conducted at public schools throughout the state. Supervision of the the clinical training experience was accomplished through use of videoconferencing.

IMPLEMENTATION

As part of the admissions process, graduate students received permission from the public school administrator to participate in a clinical training program utilizing videoconferencing technologies. Each student received training on the operation of the videoconferencing equipment. They were given use of a videoconferencing unit, a 13 inch TV/VCR unit, and a wireless in-the-ear (ITE) monitor. A videoconferencing unit appropriate for use in supervision should include a self-focusing camera, directional microphone, a computer application known as a codec that compresses and decompresses the signal for transmission over the Internet and a remote control (Bull, 2000). The videoconferencing units selected for this project transmitted data over the Internet using a TCP/IP transmission protocol. Therefore, it was necessary for the student to have Internet access in the room in which he/she was providing services.

Next, the clinical instructor from the university communicated with the technology support personnel at the public school in order to establish the network configurations necessary to conduct transmission between the two locations. The student clinician was responsible for obtaining the necessary consents and permissions from the family of the clients involved in the supervisory process.

After the network configurations were complete and the videoconferencing equipment was in place, the student conducted several trial transmissions using the videoconferencing equipment. The student and clinical supervisor then agreed on a weekly schedule of observation—typically, one 4-hour block per week. At the beginning of each session, the student and supervisor discussed upcoming clients. Once the client entered the room, the clinical supervisor blocked the outgoing audio and video signals so as not to distract the client during the session. The supervisor observed the session, with the ability to remotely adjust the camera view at the far site (the public school). The supervisor could interact with the student at any time either by resuming audio transmission or by utilizing a wireless in-the-ear monitor. Use of the in-the-ear monitor allowed the supervisor to speak to the student without the client being able to hear the interaction.

At the end of the session when the client was no longer present, the supervisor and student resumed the two-way audio-video interaction and discussed the session. The supervisor also sent written feedback regarding the student's clinical performance in the form of an e-mail or e-mail attachment.

RESEARCH FINDINGS AND IMPLICATIONS

Dudding (2004) conducted research examining student perceptions of the use of videoconferencing for supervision. Student perceptions were examined in the areas of a) the relationship between the supervisor and graduate clinician, b) negative factors such as technical difficulties, and c) the overall quality of the supervisory session. Graduate students in speech-language pathology were supervised employing both videoconferencing over IP and traditional onsite supervision. Differences in perceptions of the supervisory process were examined for each condition. Data were examined for intervening variables such as prior clinical experience and expectations of the student clinician and the quality of videoconferencing transmission. Refer to Figure 1 for a representation of the variables under study.

The results of this study did not identify significant differences in the perception of the supervisory process between the conditions of onsite supervision and supervision employing videoconferencing. Neither prior clinical experience nor expectations of the supervisory process had an influence on graduate students' perceptions of the supervisory process. Unexpectedly, technical problems were not shown to negatively impact perceptions of the overall supervisory process.

Overall, student participants reported that the use of videoconferencing for supervision was an effective and efficient means of providing supervision. They did

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