

## **Desktop Videoconferencing System: A Tool for Supervising University Students at a Distance**

This presentation will describe and present quantitative and qualitative data on how a desktop videoconferencing system is used to provide effective and efficient feedback to educators seeking special education certification and taking field-based classes at a distance. The accessibility of desktop videoconferencing systems makes it possible to directly observe and provide feedback to university students in actual teaching situations. Videoconferencing presents unique opportunities for working with students with limited access to university programs, either by location as with students in rural areas or for students with a disability that makes travel to the university campus difficult.

The supervision of students in a practicum or field-based setting can be challenging during teacher training when the university student is not in close proximity to the university or does not have easy access to university faculty. Attempts to reduce faculty travel time during supervision in the past have included videotaping the practicum experience, hiring onsite supervisors, or hiring an adjunct for on-site supervision. Desktop videoconferencing is a viable tool that is now available for observing practicum students at a distance.

For this research project at the University of North Texas, the Polycom ViewStation 128 is used to deliver field-based supervision opportunities to students in areas outside the main campus of the university. The Polycom ViewStation 128 includes: document camera input, VCR recording and playback, 10 megabit LAN connections, telephone input, optional 2<sup>nd</sup> microphone, ISDN or Ethernet/LAN connections, data speeds between 128 kbps and 768 kbps, optional upgrades for quad BRI and optional upgrades for multipoint communications. In addition, the ViewStation 128 provides full motion video (30 fps), echo cancellation, and allows the remote site to control both cameras, including pan, tilt, and zoom functions.

The ViewStation connects directly to the television and does not require a computer. The ability to connect to a standard television set greatly reduces the technical expertise needed at the remote location. From our experience with several desktop videoconferencing systems, individuals that are uncomfortable installing computer hardware and configuring video conferencing software seem to be more comfortable using a television-based system. For this project, the Polycom is placed on the top of a flat screen television and a two-inch wide industrial strength Velcro is attached to the TV and the Polycom unit to keep the unit from falling.

Polycom ViewStations and television sets are checked out to university graduate students enrolled in courses in the Special Education Program at the University of North Texas. Faculty at the university support students setting up the technology in the school classroom or school office. There are two desktop videoconferencing units in key faculty members' offices on the main campus and one unit available in the general access lab located in the education building.

Schedules are set for supervision, collaboration, advising, and other uses. In addition, students and faculty are encouraged to use the videoconferencing systems in an ongoing, spontaneous fashion. Communication and supervision opportunities among the university students and faculty members using the desktop videoconferencing system are enhanced in terms of immediacy, accuracy, and frequency. The faculty member can see

and hear the university student in the school site, understand the context, and provide feedback. It is possible to observe facial expressions, hear voice inflections, and listen to the content of the discussions and/or assessments. Collaborating and enlisting others expertise is enhanced because other faculty members can join in the observation when additional feedback is needed. The research conducted with this project deals with the ease of use, accuracy of assessments, and feedback from university students and faculty. The data will be presented, as well as a discussion on the strengths, areas of concerns, and future recommendations for the technology.

As new technologies emerge that are affordable and suited to the purposes of the user, individuals and university faculty should consider their own unique circumstances and select the technology that best fits their needs. Field testing new videoconferencing technologies to determine appropriates for the field-based requirements continues to be a high priority in teacher training programs seeking to reach university students enrolled in distance education programs.