

Chapter XV

Enhancing Teacher Preparation through Videoconferencing Types

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ABSTRACT

This chapter focuses on the enhancement of teacher preparation through various types of videoconferences and through various types of engagement within a videoconference. These can include: expert; university to school; peer-to-peer and meetings; multiple sessions; mentoring/observation; learning about videoconferencing; and interviewing/job searching. Both preservice students and their professors can benefit from involvement in videoconferencing. Teacher-preparation students become more engaged in the content through interactive activities, streaming video, blogs, discussion areas of programs, Webinars, shared applications, tele-education aspects of videoconferencing, and follow-up discussion boards. Instructors can improve the quality of their instruction to maximize learning by transforming their teacher-preparation classes into ones in which students have more in-depth and comprehensive experiences to prepare them for future teaching.

INTRODUCTION

The purpose of educational videoconferencing, people learning interactively by seeing, hearing, and sharing over distance in real-time, has remained constant over the years of videoconferencing. In 1995, a small group of teacher-preparation educators began to use Cornell University's CUSeeMe, the first commonly-used videocon-

ferencing desktop program, to videoconference with classes from other universities, experts from other universities, and experts from outside the university (Wilkerson, 2006). Today, teacher-preparation instructors use videoconferencing to address many potential barriers to instruction such as student placements in distant locations, students living far away from the university, a growing number of critical topics to be covered

in-depth for which the instructor may not be an expert, and the need to model global collaboration. Overall, educators can use the tool of videoconferencing to help better prepare their students for future employment as teachers and for future professional development.

Videoconferencing use is on the rise at universities. Northwestern University (2004) reported that in 2004 they conducted twenty-five videoconferences a week, and there was a growing increase in the request for this service; also, George Mason University increased its videoconferencing by 350% from 2002 to 2003 (DoIt Support Services of George Mason University, 2004). Teacher-preparation instructors are using it to communicate with colleagues about teacher-preparation issues, as well as with their students as an instructional tool in a multitude of ways that range from accessing virtual experts to observing student teachers in remote locations (Lehman & Richardson, 2004). Setups also vary; education instructors use formal videoconferencing room systems with multiple cameras and microphones as well as desktop/laptop videoconferencing systems with a portable microphone and camera to connect to students and colleagues. With the right support, university educators can videoconference with many students or colleagues (multi-point) just as easily as one-to-one (point-to-point).

The versatility of videoconferencing in education has led to a multitude of descriptive terms such as distance education, interactive videoconferencing, transmissive pedagogy, tele-teaching, visual collaboration, digital communication, computer-mediated learning, online learning, e-learning, Internet-based learning, or virtual learning. Teacher-preparation videoconferencing can range from a one-time educational use to a series of videoconferences within the class to a complete course conducted through this media. This chapter will not address videoconferencing as total course delivery, but as a component embedded within a class.

BACKGROUND

Before instructors in the field of P-12 teacher preparation utilize videoconferencing, they need to learn the advantages and disadvantages of its use. Frequently-cited advantages indicate that the use of videoconferencing:

- Lessens or eliminates travel time
- Is cost effective since a “visiting” expert or class has no travel costs
- Enables the participants to see and hear each other
- Allows for diverse perspectives from an audience outside of the classroom
- Provides a vehicle for global collaboration
- Allows for materials and presentations to be shared
- Provides access to experts and equipment that is unavailable in certain locations
- Permits a high level of interactivity
- Incorporates many multiple intelligences
- Requires little skill to run a videoconferencing session

On the other hand, educators acknowledge potential disadvantages of videoconferencing:

- It is synchronous so all participants have to be at the conference at the same time, regardless if one person is from Australia and one is from New York
- It may present a language issue if all participants do not speak the same language
- It requires an fast Internet connection
- It necessitates faculty and student preparation for an effective videoconference
- It depends on technology assistance if there is a major connectivity problem
- The quality of videoconferencing varies not only with the equipment, but also with the speed and quality of the Internet connection

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