

## Chapter 6.8

# Policy Issues Regarding the Instructional and Educational Use of Videoconferencing

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### ABSTRACT

The purpose of this chapter is to identify policy issues for videoconferencing at the elementary through college levels. As videoconferencing becomes a part of our educational landscape in schools across the country, it is important to understand what policy implications need to be addressed in regards to this educational resource. Issues such as ownership, content, and access are some of the areas that suggest policy discussion. Federal, state, and international policies that guide the use of videoconferencing will be discussed. In sum, this chapter attempts to investigate policy issues and trends related to videoconferencing that informs the educational (PreK-12), business (training), and academic (higher education) communities that use this resource.

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### INTRODUCTION

The use of the Web/Internet in classrooms has quickly evolved from an occasional resource to a mainstay in education. The trend is clearly evident in New York State's mandate that all public schools be equipped with Internet access. It also can be argued that all major universities in the United States now use and rely on Web resources for many of their educational needs (Bruce, Dowd, Eastburn, & D'Arcy, 2005). Web and Internet resources have revitalized interest in distance education in that they provide a cost-effective and rapid way in which to deliver quality education to a broad spectrum of students. In this respect, online education is quickly becoming a central component of higher education; more colleges and universities are now offering courses using this resource (Lewis, Snow, Farris, & Levin, 1999).

The recent explosion of distance learning technologies clearly demands greater attention from educational researchers and policy-makers if we are to develop a complete understanding of the limitations and possibilities of this innovation. If distance learning is to be viewed as a new venue for learning, rather than as a technology or tool, it is important to examine the new and exciting possibilities made available by new communications and computing technologies.

These possibilities include advancements in videoconferencing that allow classrooms to obtain real-time answers to their questions, to have close-up views of marine life hundreds of miles away, to interview authors of their favorite books, and to exchange ideas for a project with students from another country. Unlike other distance learning tools that have been known to lack interpersonal instructional support crucial for reflective learning (Nobel, 1998), videoconferencing allows for face-to-face interactive experiences that are not possible with e-mail, chats, or threaded discussions. Furthermore, current Internet-based connections have given schools a much more cost-efficient method for establishing videoconferencing, while expanding the possibilities for intellectual growth. Schools are able to take advantage of their pre-existing Internet connections, rather than having to purchase and maintain an ISDN telephone line, which can be prohibitively expensive for schools.

As videoconferencing becomes a part of our educational landscape in schools across the country, it is important to understand what policy implications need to be addressed in the implementation of this educational resource. Issues of ownership, content, presentation, and access are some of the areas that suggest policy discussion. Questions arise such as: Are there federal and international policies that guide the use of videoconferencing? Are there state regulations and policies that focus on videoconferencing? What do school district administrators, board members, and teachers need to be aware of when they create videoconferencing environments? This chapter proposes to identify

policy issues of videoconferencing instruction at the Pre-K through college levels.

## **BACKGROUND**

Before our discussion of policy implications, in regards to videoconferencing, it is important to describe what we mean by videoconferencing, what the origins of videoconferencing are, and the history of videoconferencing. The term “videoconferencing” can be traced back to two Latin words, “videre” which means “I see” and “confere” which means to “bring together.”

Videoconferencing, which is a collection of technologies that form the foundation for a wide variety of applications, can be defined as being an exchange of digitized video images and sounds between conference participants at two or more separate sites (Wilcox, 2000). Videoconferencing allows people at two or more locations to see and hear each other at the same time, using a compressed video system to transmit information from one location to another (Packard Bell, 1995).

In the 1930's, Bell Laboratories gave the first public demonstration of two-way videoconferencing, which involved picture and sound between locations in New York City (Montagna & Carlton, 1998; Wilcox, 2000). In the 1930's as well, Europe began experimenting with the technology, but due to World War II, the technology was not further developed for almost two decades. In 1964, Bell Laboratories introduced the first picture phone at the World's Fair in New York City. The first videoconferencing systems developed by Bell Laboratories failed in part because of poor picture quality and the lack of efficient video compression techniques. In 1970, videoconferencing capabilities were offered to consumers for the cost of \$160.00 a month, but the new innovation proved to be too costly for most consumers. Improvement of the technology needed to take place, along with affordability. This led other companies to improve upon the technology in the

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