Chapter XII

Videoconference, Audioconference, and Video Chat

Introduction

Videoconference and audioconference have been used for communications in businesses for many years. In teaching and learning videoconference has been used for at least the last 15 years and possibly longer. Videoconference and audioconference technologies have been used in education, especially in distance education where students and teachers are in different locations. Like all educational technologies, videoconference and audioconference are suited to some and not all teaching and learning activities. Before these established real time communications technologies (RTCs) and the newer technology video chat are explored they need to be carefully defined to eliminate or minimize confusion.
Definitions

Videoconference, sometimes referred to as video-teleconference is a technology that allows two-way video and audio communications between remote parties. In videoconference parlance the parties or locations are referred to as points or endpoints. Audioconference is the technology that allows two-way audio communications between remote parties. By this definition a person-to-person phone call is an audioconference, so to differentiate, audioconferences are defined as the technology that allows two-way communications between at least three remote parties. The newer technology of video chat is defined as an application of computer technology that allows two-way audio and video communications between remote parties. Thus video chat can be thought of as videoconference on a computer.

Video chat is gaining acceptance as a videoconference tool and is developing into enhanced video chat (as discussed later in this chapter) and it is clear that enhanced video chat poses a threat to the market traditionally held by videoconference technology suppliers. Perhaps, for this reason several videoconference hardware manufacturers have recently initiated strategies to reposition themselves in the marketplace. For example, two of the world’s leading suppliers, Tandberg and Polycom have introduced and prioritized high definition videoconference endpoint technology. Also, both suppliers have also introduced a range of telepresence technologies that use high definition videoconference to emulate a real meeting by creating a closer-to-reality experiences through an “immersive multimedia experience” (Polycom, 2006).

Another similar technology is Web conference. To differentiate between videoconference and Web conferencing, videoconference is defined here as not being hosted by a World Wide Web browser. While this difference might seem trivial and the functionality of both technologies is very similar, the differentiation is significant when used to describe the practices concerning videoconference equipment that is installed into teaching spaces with multiple cameras, screens, and microphones. On the other hand, Web conference technology is often designed for a majority of single user endpoints, as Web cams and headsets are the basic technology used.

Background

In essence videoconference has been around for as long as television, as videoconference can be thought of as two parallel, counter directional, closed-circuit television systems. However it was not until the 1980s that dedicated videoconference technology appeared on the market. The systems took advantage of the then new digital telecommunications networks such as integrated, services digital network (ISDN).
The Use of Digital Resources to Support Elementary School Teachers’ Implementation of the Common Core State Standards

Amy Jensen Lehew and Drew Polly (2013). Common Core Mathematics Standards and Implementing Digital Technologies (pp. 332-338).

www.igi-global.com/chapter/use-digital-resources-support-elementary/77492?camid=4v1a