

Multimedia Communications in Health Care

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Multimedia has become one of the buzzwords of the 1990s. It has been both hailed as the savior of our educational system and derided for being as practical as 3-D glasses. It is the focus of numerous worldwide conferences and trade shows and has led to the development of countless software products.

But what is multimedia? Clearly, it means different things to different people. This paper will attempt to clarify some of the concepts associated with multimedia and its effective implementation within the health care industry. These findings are based on experience, both in our research facility as well as in a number of Boston hospitals, with actual deployment of multimedia communications systems.

In general, when people talk about multimedia, they are almost always talking about the experience of observing some combination, or integration, of various media, such as sound, images, text, and video. On the one hand, there is a presentation of a multimedia event and, on the other hand, an audience that observes (and perhaps controls) that event. We refer to this as "multimedia presentation," not unlike listening to a record or watching a movie. It is essentially a private event that can be done individually or as part of a group.

Although computer-based multimedia presentation is exciting and promising as a new technology, we feel that it is only a partial approach, because it characterizes the use of multimedia as a private experience between a human and a machine. We believe that the promise of multimedia cannot be fulfilled without a different kind of technology, namely, multimedia communication.

We believe that computer-based multimedia presentation technology, by its very nature, is limited to private experiences. What is called for is a method by which the private experience can be shared between locations, devices, and, most importantly, people. Instead of listening to a record that I happen to have in my possession, I should just as easily be able to listen to a live performance or a recording that is stored somewhere miles away from me. The idea here is that multimedia communications characterize the use of multimedia as interactive, collaborative, and distributed over space and time.

The emerging multimedia industry has to date primarily concentrated on "presentation" rather than "communication." Multimedia has traditionally been "me and my PC (or workstation, or Macintosh)." But at NYNEX, we think of multimedia as the link between "me and the rest of the world." Just as data communications allow millions of users to interact with the world of record-oriented data, so too will multimedia communications allow users to access and interact with audiovisual information.