

## **Microsoft Live Meeting 2007: Web Conferencing System for Virtual Classrooms**

*by Barbara Schroeder*

Web conferencing, a technology once available only to companies with larger budgets, is now becoming more mainstream due to advances in technology and fierce market competition. In all educational settings (face-to-face, hybrid, and distance learning), this technology has the potential to engage learners and improve learning. However, how does a school choose from the burgeoning array of Web conferencing tools and applications that are offered? And a software solution is chosen, how can Web conferencing be used to enhance student learning? These questions are addressed in this article, which includes comprehensive information about a powerful Web conferencing system, Microsoft Live Meeting 2007.

### **Web Conferencing**

Web conferencing is sometimes confused with video conferencing, but is significantly different. Web conferencing systems allow participants to communicate in real time with simply a personal computer, an Internet connection, and optional microphone and Web camera (webcam). These systems can accommodate both synchronous and asynchronous communication and can create powerful virtual learning environments that closely approximate face-to-face experiences (Foreman and Jenkins [2005](#)). Participants can access and attend these online meetings through a standard Internet browser (although some Web conferencing software also requires participants to download plug-ins before they can access the meeting).

Video conferencing systems, by contrast, require that participants physically travel to a specific location to use the cameras and equipment that communicate with similar equipment at other locations. This form of conferencing limits participant flexibility by requiring travel to a physical location, rather than allowing users to choose a location from which to participate in the meeting. Although all participants in a meeting held via Web conferencing need to be available at the same time to take part in a live online meeting, each participant has the option of participating from the location of his or her choice. Web conferencing systems can also record meetings for later on-demand viewing. Increasing travel costs have increased the demand for such flexible and cost-efficient ways to meet.

Unlike video conferencing systems, Web conferencing continues to expand and improve its capabilities and efficiency due to the increases in Internet bandwidth available through high-speed connections and the sophistication of new Web-based technologies. The future of Web conferencing looks bright for consumers of this technology, which has the potential to vastly improve and enhance student learning and engagement. Total revenues for the worldwide Web conferencing software market are estimated to grow at a rate of 23 percent per year through 2010, from \$1.3 billion in 2006 to \$2.8 billion in 2010 (Gartner [2007](#)). Gartner cites the need for businesses to offer more choices and greater flexibility as the impulse behind this steady increase.

Given these expectations for growth, pricing for these Web conferencing tools should continue to decrease and become more competitive. In the recent past, it was not uncommon to spend upwards of \$50,000 to purchase a yearly license for a Web conferencing solution. However, times have changed; technology is becoming more efficient and advanced, and the competition in this market has intensified.

Moreover, free tools such as [WiziQ](#), [WebHuddle](#), [DimDim](#), and [Skype](#) can provide users with synchronous communication and collaboration capabilities in a fairly robust and stable setting. However, the future

availability of these tools and their reliability, price, and features are all unknown; these uncertainties should outweigh the appeal of the free services, since educators want to be confident that their Web conferencing solution is sustainable and efficient over a long period of time. Users will also want to be able to join a meeting through any platform, whether it be Windows, Macintosh OS X, or Linux. The ability to count on services, with very little chance of downtime, is another important factor. Web conferencing systems should be predictable and stable, since there will be training and other time commitments involved with learning and implementing the product. The cost of the system should be affordable and competitive with other Web conferencing systems of equal quality, and a full-featured set of Web conferencing features should be included. Therefore, sustainability, compatibility, dependability, predictability, and affordability plus a full array of features are essential requirements when choosing a Web conferencing system for educational purposes.

## **Using Web Conferencing in Education**

Web conferencing may be instrumental in improving learning and communication between instructors and students, reducing the perception of transactional distance. Transactional distance theory assumes that the most profound factor in distance education is pedagogy, not the physical or temporal distance that separates instructor and learner (Gorsky and Caspi 2005). Moore (1993) defines transactional distance as “a psychological and communications space to be crossed, a space of potential misunderstanding between the inputs of instructor and those of the learner” (23). It has been suggested that increased and improved student-teacher interactions can increase student satisfaction with perceived knowledge gain (Stein et al. 2005; Wheeler 2007). Web conferencing systems may serve as a tool for bridging the “psychological and communications space to be crossed,” thus improving student learning.

Web conferencing systems can provide benefits in almost all educational environments. For example, students who cannot make it to class for health or other reasons could participate in a live class meeting from another location. Distance students can communicate instantly with their classmates or instructors through virtual classrooms or during virtual office hours, alleviating their anxieties and getting answers to their questions when they need them. Experts from around the world can interact with students. Webcams can transmit facial expressions and other nonverbal cues, thereby improving communication and understanding.

If Web conferencing is now a viable option and can provide benefits to students and instructors, how does one choose from the variety of applications currently available? Many Web conferencing systems are available, but only a handful meet the requirements of educators and institutions. Microsoft's Live Meeting 2007 offers a range of features that meet most educational needs.

## **Understanding Microsoft Live Meeting 2007**

Microsoft Live Meeting 2007 is the latest version of Live Meeting and is offered as a hosted as well as a customer premise equipment (CPE) solution through Office Communications Server 2007. Whether attendees use the Live Meeting service or the Office Communications Server 2007 (OCS 2007) to power their Web conference, they will use the same Web interface and client to deliver the meeting.

Microsoft Live Meeting 2007 includes the following basic features found in most enterprise Web conference systems:

- Rich media presentation tools (including Windows Media and Flash)
- Multiparty two-way Voice over Internet Protocol (VoIP) audio integration
- Live webcam video
- Desktop application sharing
- Chat interactions

- Whiteboard marking tools
- Recording capabilities
- File transfer
- Polling functionality that allows for participant feedback
- A shared notes pane
- Meeting reports

However, Microsoft Live Meeting 2007 includes additional features that set it apart from its competitors, including:

- Panoramic 360-degree view of the meeting room, which allows for a full view of the meeting space and provides a panoramic view of participants
- A user-customizable interface
- Advanced testing and grading functionality
- An active speaker indicator (which causes participants who are speaking to appear in the webcam view automatically)
- Personal recording capabilities, which allow recordings of meetings to be saved to each participant's computer
- High fidelity recording capabilities
- 99.99% server availability
- Compatibility with Linux and Mac operating systems via Live Meeting Web Access (MWA), although full functionality is limited through the MWA interface
- Unlimited data storage of recorded meetings on Microsoft's server for 365 days
- Affordable, competitive pricing

One of the most fascinating features available through Live Meeting 2007 is Microsoft Roundtable. The camera is about \$2000, but it allows both a full panoramic view of the meeting space and a view of the current speaker ([Figure 1](#)).

## Getting Started with Live Meeting 2007

In order to understand how Live Meeting works, you should sign up for a free trial and experience it firsthand. Microsoft also provides links for online training and other resources to help you understand how to use Live Meeting. You will set up all meetings through the Live Meeting Manager interface, which allows you to create instant meetings or schedule future meetings ([Figure 2](#)).

After you log in, you will then be able to schedule a meeting, create an instant meeting (via the "Meet Now" option), or join a meeting. You will be presented with various options as you move through the process of scheduling a meeting, but these steps are simple and straightforward. Through this interface, you will be able to manage your meetings, change your user preferences, add people to your address book, or create events for larger group meetings. You will also be able to view reports on your past meetings and administer your account.

After creating a meeting, you will enter the meeting room and prepare it for your presentation. Before you do this, you will be prompted to download the client software. This download file is fairly large (about 15.8 MB), so you will need to wait for a few minutes, depending upon your connection speed. You only need to perform this download once, however. You should inform meeting participants of the need for the download so they do not wait until the last minute to perform this step, which could make them late for the meeting. Also, all participants should be aware that this installation file is for Windows operating systems only; Linux or Mac users will need to access the Live Meeting via Windows Meeting Access (WMA).

When a meeting organizer first enters the meeting room to set it up, the console is blank, ready for configuration ([Figure 3](#)). The meeting organizer can then arrange the room according to the needs of the users. The display console is uncluttered and easy to use with the drag and drop functionality of the individual windows or “panes.” The menu bar at the top right offers easy access to various tools and functions, including file transfer. You can work with a pane where it appears under the command bar, drag it to any location on your desktop to use as a floating window, or dock it on the left margin, right margin, or bottom of your console window. Everything scales and readjusts automatically.

PowerPoint slide display works well in Windows Live Meeting 2007, including all animations, hyperlinks, transitions, and other multimedia effects. Annotation tools help make presentations more interactive and alive, and again, these tools are easy and intuitive to use [Figure 4](#).

## Pricing

The cost of Microsoft Live Meeting 2007 depends upon the number of users and the purpose for which you are purchasing it—that is, whether the program is purchased for commercial or educational purposes. You will need to decide early on whether you want to host the software on your Office Communications Server 2007 or have Microsoft host Live Meeting 2007 for you, and you should also have a pretty good idea of how many people in your organization will be creating and managing meetings and how many in your organization will be participating in meetings. Having this information at hand when you contact Microsoft will expedite the process of getting a quote.

Microsoft includes information and pricing on their Live Meeting licensing [Web site](#). With a standard license, the meeting size is capped at 15 participants. With a professional license, up to 1250 participants can attend an online meeting and users receive unlimited storage of shared meeting recordings for 360 days. The price of a professional license is currently \$15.42 per user per month, with a minimum of five users on the account. Standard licenses cost \$4.58 per user per month, also with a minimum of five users. There are no one-time setup fees for either licensing option. Licenses are required for all users within an organization who use Live Meeting, but are not required of external participants invited to online meetings by licensed users.

If your university or organization has a Microsoft Site License, then you should check with them on pricing.

## Finding Pedagogical Strategies in Synchronous Environments

In order to make Web conferencing an effective tool for learning and collaboration, instructors need to know how to make the best use of their virtual classrooms. Ruth Colvin Clark (2005), a well-known researcher in the field of distance and multimedia learning, has suggested several ways to use the features of Web conferencing to support instructional goals in various types of courses. Hybrid courses are well suited to virtual classrooms. You may want to set up the initial classroom meeting in a face-to-face environment in which you introduce students to the Web conferencing software, and then conduct a Web conference soon thereafter for one of the online sessions. For online classes, you may decide to conduct monthly online meetings to keep students connected to each other and remind them of upcoming assignments or simply to answer questions. Students may want to set up virtual meeting rooms for small group assignments, brainstorming, or just talking. All of these options are possible with Web conferencing systems.

Clark (2005) suggests some other strategies that can enhance Web conferencing sessions. In general, online sessions should be limited to about 60 to 90 minutes in length, as multiple virtual class sessions are better than one long one. Between sessions, students could work on projects that they post for review by other class members and the instructor.

## Conclusion

There are some challenges inherent in incorporating Web conferencing and creating synchronous online learning environments. These challenges include simply getting the software, learning how to use it, and then training students how to use it. No matter how effortless it seems, some users will encounter difficulties in setting up their equipment (microphones and webcams) and will need additional assistance. If you might be unable to assist them, you should have a technical person on your staff who will be able to help when these difficulties arise, and you also will have access to technical assistance through Microsoft Live Meeting.

You will need to understand how to set up an online meeting effectively and how to communicate in this environment. A great book that provides synchronous online strategies and detailed information on different types of synchronous tools is *Learning in Real Time: Synchronous Teaching and Learning Online* (Finkelstein 2006).

You will need to set up protocols and conventions for the participants and be ready to act when things don't go as planned. If you have a guest speaker, for instance, you may need to set up a producer or facilitator who can help this person. You may even need to include a co-facilitator during your own sessions at first to provide a more comfortable environment. It will take some time and practice, but in the end, Microsoft Live Meeting 2007 can provide a much richer learning environment for both you and your students.

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