The Right Tools for the Job— Technology Options for Adult Online Learning and Collaboration

Why This Guide?

Many options exist for using technology as a tool for adult learning, and each day, it becomes easier to share information online than it ever has been. Online learning technology has grown from one-sided communications to numerous options for audience engagement and interactivity. This guide introduces a variety of tools, online platforms, and terms related to current online learning technology and gives advice on selecting the best option for your needs. The guide is not intended to inform the reader on *how to* create content for online learning. For information on how to create online learning sessions, consider the resources in Appendix B.

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Goals and Definitions

This guide identifies a number of online learning options and provides guidance on which tools are appropriate for different settings. As when selecting nontechnology learning tools, the goals and audience needs are paramount when choosing a technology platform. Users of these tools are encouraged to "test drive" a variety of approaches before identifying the best approach to use in different circumstances.

For the purposes of the discussion in this paper, we use the following definitions:

- An **online learning tool** is a type of technology that can be used to disseminate information or connect individuals online. Webinars, video chats, and screen shares are all online learning tools.
- An **online learning platform** is the particular software used for learning. For example, a webinar is an online learning tool, and Adobe Connect is a platform.

Choosing the Right Technology: Three Types of Tools

Choosing the right tools—such as webinars, screen shares, and video chats—or platform can make a difference in successfully sharing information or establishing a forum for productive collaboration. Some tools are more suitable for organizing participants into groups, similar to an in-person workshop, while others are better for sharing information and teaching participants how to navigate content. For a conversation with stakeholders about upcoming events and activities, for example, a conference call may suffice. For more in-depth teaching and learning opportunities, webinars are popular and easy for most participants to use and navigate. However, hands-on experience is helpful for learning and internalizing skills, which can be challenging in traditional webinars, where there is little interaction with participants and information is shared only in one direction: from speaker to audience. Fortunately, online platforms that incorporate newer technologies can provide more options for different kinds of learning

The following section examines three types of online learning tools: webinars, screen shares and conference calls, and video chats. A detailed list of commonly used platforms that are available for each of these three tools is provided in Table 1.

Webinars

Webinars offer the presenter the ability to share interactive content (including links, downloadable materials, videos, and polls) and organize group chats to disseminate information and cultivate a conversation. Webinars include the following features:

- Screen share capabilities
- One-way video chat
- Streaming video
- Presentation support
- Audience polling

- Private chat with participants
- Group chat rooms (not available on all webinar platforms)
- Recording capabilities

Tip: One way to ensure audience interaction during a webinar is to use a polling feature. Most webinar platforms offer some type of polling function, and online polls can be inserted into PowerPoint presentations for use in screen shares and video chats.

Screen Shares and Conference Calls

A screen share (plus conference call) shows the speaker's screen to all participants so that a speaker can lead the conversation and content by sharing his or her computer screen digitally with attendees. A conference call component or a private chat room can be added to a screen share to create a dialogue between presenter and audience. Numerous free conference-calling platforms are available.

Screen shares supplemented with a conference call or private chat room for participant dialogue are useful when teaching an audience how to navigate a website, complete an online task, or use a specific training protocol.

Screen shares are not always the best solution for interactive presentations, because while participants can view the shared screen, they cannot interact directly with content.

Video Chats

A video chat is an online meeting in which each attendee can be seen and heard live on the same screen. For small groups with five or fewer participants when interpersonal interaction is important, a video chat can add a level of involvement that is not available over the phone. Some platforms have a screen share option that supports dissemination of other visual content, such as a PowerPoint presentation or video.

Tip: When leading or participating in a video chat, ensure that the visual background won't be distracting to others!

Detailed information is given in Table 1 about commonly used service providers and features for webinars, screen shares, and video chats. This information is not an endorsement of any tool; it is intended to describe the platforms available for sharing and collaboration. Webinars listed are Adobe Connect, GoToWebinar, WebEx Meeting Center, and WebEx Event Center. Screen Shares listed are GoToMeeting and ScreenLeap. Video Chats listed are Skype and Google Hangout. The table includes 26 yes-or-no features for each platform and information about prices, user registration, evaluations, reminders, encryption, tutorials, and FAQs.

Table 1. Commonly Used Tools, Platforms, and Features Tools Webinar Screen Share Screen Share Video Video Chat Webinar Webinar Webinar Chat WebEx WebEx GoToMeeting ScreenLeap Skype Google **Platforms** Adobe GoToWebinar Hangout Connect Meeting **Event** Center Center **Features** Price (Monthly)* \$99+ \$99+ \$49 \$99 \$49+ Free \$10 Free File transferring Υ Υ Υ Ν Υ Ν Ν Υ Υ User registration Υ Υ Υ Υ Ν Ν Υ Polling Υ Υ Υ Υ Ν Ν Ν Ν Recording Υ Υ Υ Υ Υ Ν Ν Υ Password protected Υ Υ Υ Υ Υ Ν Ν Ν Private chat Υ Υ Υ Υ Υ Ν Ν Υ Evaluation/reporting Υ Υ Υ Υ Υ Ν Ν Ν Υ Υ Ν Υ Υ Ν Ν Reminders Ν User profile creation Υ Ν Υ Υ Ν Υ Ν Υ Encryption Υ Υ Υ Υ Ν Υ Υ Υ Υ No attendee Ν Ν Ν Ν Ν Ν download required Private Group chat Ν Ν Ν Ν Ν Ν Mobile app available Υ Υ Υ Ν Ν Ν Ν 250 100 25 100* 25 25 10 10 video Number of attendees 100 hangouts Υ Υ Υ Υ Υ Υ Υ Υ Real-time screen sharing VolP Υ Υ Υ Υ Υ Υ Υ Υ Webcam Υ Υ Υ Υ Υ Υ Υ Ν compatibility Embedded video Υ Ν Υ Υ Ν Ν Υ Ν sharing Υ Υ Υ **Tutorials** Υ Υ Υ Ν Υ E-mail support Υ Υ Υ Υ Υ Υ Υ Ν Υ Υ Υ Υ Υ Ν Υ Telephone support Ν Online manual Υ Υ Υ Υ Υ Υ Υ Υ Υ Υ Υ Υ Υ Υ Υ Υ FAQs page Υ Υ Υ Υ Ν Ν Ν Ν Live chat support Remote IT support Υ Υ Υ Υ Υ Ν Ν Ν

Notes

^{*}Pricing information was collected in April 2014 and may have changed since then.

^{**}The number of attendees depends on the pricing structure. In some cases, like WebEx, the more you pay, the more people you can "seat."

Appendix A. Online Learning Terms

The following terms were identified by compiling an exhaustive list of online learning terms from a variety of sources and by culling the list to focus on the tools and resources mentioned in this document. For more information on the sources, see Appendix B.

- active learning. A method of learning that involves discussion, debate, brainstorming, and problem-solving instead of more conventional instructor-centered methods, such as lecturing.
- **asynchronous learning.** An online Web-based instruction tool that allows learners to complete lessons at their own pace from a remote location.
- **audioconferencing** (or audio conferencing). A voice-only connection, via telephone or computer, between three or more participants in different locations.
- bandwidth. The speed, capacity, and reach of Internet connectivity.
- **blended learning.** An instructional approach that combines face-to-face learning with online learning activities.
- **blog.** *n*. A website or Web page on which users express ideas and opinions on a regular basis. *v*. To add new content or material to a blog site.
- case study. A specific situation used to illustrate a concept or model, which students can use to draw conclusions and solve a problem.
- chatroom. An online forum used for real-time discussion.
- **cognitive load.** The burden placed on working memory during instruction.
- **computer-based instruction.** A method of instruction that uses a computer as the central learning tool.
- **computer-based training (CBT).** An instructional course administered on a computer and not requiring an instructor to be physically present.
- content repository. An interactive databank that contains content to be shared and saved.
- **cooperative learning.** A teaching strategy in which students with different levels of ability are grouped together and guided through learning activities to improve their understanding.
- **course** management system (CMS). The technology platform through which online courses are administered. A CMS facilitates the creation and editing of course content, communication tools, and assessments.
- **courseware.** Any instructional software delivered via computer or other digital platforms.
- digital citizenship. A set of guidelines for appropriate online behavior.
- digital learning. Also referred to as online or blended learning. See "online learning" and "blended learning."

digital literacy. The ability to search for, evaluate, understand, and create information by using technology.

discussion board. An online platform for posting and replying to messages.

distance education. Any type of educational activity in which the participants are in different locations.

distance education or distance learning. A method of teaching that uses an electronic device such as a mobile phone or computer to administer instruction to students in different geographical locations.

distributed learning. A method by which lessons can be administered without requiring the instructor and students to be in the same physical location; often used synonymously with the term "distance learning."

electronic learning (**e-learning**). An umbrella term that refers to all types of training, instruction, and educational courses that are presented via a digital medium, such as a computer or tablet.

embedded video. A visual presentation that is shared through a website or Web page on the Internet.

emoticon. Symbols used in electronic communication to express a range of emotions.

encryption. The act of securing data or information by converting it into code.

engagement. The process of actively engaging in a course or lesson in order to promote understanding and retention of knowledge.

face-to-face. In-person. For example, a face-to-face meeting between two or more parties.

file transferring. The act of sharing files over a computer network like the Internet.

filter (for browsers). Software that restricts access to specific websites or Web pages.

instructional design. The act of identifying the knowledge and skill gaps of a particular group of students and developing learning experiences that address these needs.

instructional designer. Someone who uses the principles of learning, pedagogy, and content frameworks to develop instructional materials and learning experiences for online courses.

instructional media. The materials that instructors use to teach students.

Internet. A computer network that connects global users via TCP/IP protocol.

intranet. An internal network for authorized users.

investigative inquiry. A learning strategy that encourages students to use their own discoveries to explore and draw conclusions.

learning community. A website or platform for sharing knowledge, problem-solving, questioning, and discovering.

learning contract. An agreement outlining the objectives to be accomplished over a specific period of time or through a particular learning activity.

learning management system (LMS). A platform through which students access online courses.

learning object repository. A venue for storing digital learning materials.

learning outcomes. Specific guidelines about what the results of learning should be and how they will be evidenced.

licensed content. Content that is available only with permission, which generally requires a fee.

lurking. The act of reading posts in a discussion but not contributing to it.

mobile app. A software application that runs on smart phones, tablet computers, and other mobile devices.

mobile technologies. Portable communication devices, such as mobile phones, laptops, tablets, and iPods, through which, users can access and communicate information.

netiquette. The set or norms, guidelines, and protocol that constitute appropriate online behavior.

online learning. The act of learning from digital material in a virtual setting.

online learning community. Websites whose content must be curated and managed, with features including discussion boards and document libraries.

online learning platform. The particular software used for learning. For example, Adobe Connect is a platform used for a webinar.

online learning tool. A type of technology that can be used to disseminate information or connect individuals online. Webinars, video chats, and screen shares are all online learning tools.

podcast. Multimedia files that are available for playback and are accessed over the Internet.

polling. The act of capturing the opinions of a group.

private chat. An online conversation limited to specified users.

real-time screen sharing. A function that allows authorized users to remotely observe a designated computer screen.

RSS feeds. Really Simple Syndication. An up-to-date aggregate stream of information on a given topic.

simulation. The use of a real-world situation to answer a specific question or illustrate a given principle.

Skype. An Internet-based software program that enables global voice and video communication.

social networks. Online platforms through which users can share, comment on, and contribute thoughts among each other.

social presence. The level to which a person has inserted himself or herself into a digital community.

synchronous communication. Online discussions occurring remotely but in real time.

synchronous learning. Online learning in which the students interact in real time in different locations.

tag (or meta-tag). Keywords and descriptive terms added to online material to enable targeted searches.

technology facilitator. A person who provides training and support for technological platforms.

threaded discussion. A continuous commentary of messages used by a group online.

Twitter. A microblogging website, which requires posts to be 140 characters or less.

universal accessibility. A legal requirement that states that all learning materials and information must be accessible by anyone, regardless of disability.

user profile creation. A visual display of personal information.

user registration. The act of providing specific information to prove identity.

videoconferencing. Technologies by which users in two or more different locations can interact via two-way video and audio.

virtual classroom. An online discussion forum in which students interact about coursework.

vodcast. A video that is produced for display on mobile phones, tablets, and iPods.

VoIP. Voice over Internet Protocol. A method of placing telephone calls via the Internet.

Web conferencing. The use of phone and Internet to join people together in real-time discussions.

webcam compatibility. The ability to integrate webcam functionality.

webinar. A seminar that is conducted over the Internet.

wiki. A website developed by a group of users who work collaboratively to create and edit content.

Appendix B. Resources

- The following resources helped inform this guide and can be used for further information on the subject.
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