

Software for Creating E-Learning Materials

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E-learning materials are Internet-accessible presentations for your learners to use any time and from any place with an Internet connection. If you are ready to create e-learning materials, you may be asking “what tool should I use?” This guide is designed to help with your decisions. We offer information and commentary on several popular tools and methods for creating e-learning materials.² We recognize the ever-changing industry.³

Creators of e-learning materials must consider these four questions.

- ?
- WHAT FEATURES DO I NEED?** Do I want a narrated or non-narrated presentation? Do I want menus so users can navigate through the material? Will there be hyperlinks in the presentation? Embedded video? Attachments? Animation? Do I want the users to take a self-assessment quiz or complete a survey? Do I need graded quizzes?
- ?
- HOW WILL USERS ACCESS THE MATERIAL?** From a website? From a learning management system (LMS)? From a cloud-storage site? Does the material need to be password protected, or can it be available to all?
- ?
- HOW MUCH TECHNICAL STUFF DO I NEED TO CONSIDER?** E-learning materials must be in a format to allow easy viewing through an Internet browser. A number of file formats can be considered for e-learning materials, including video file format (e.g., .wmv), Flash files (.swf), and a newer format, HTML5. It is important to try to choose an option that will be accessible on multiple devices (computers, tablets, phones) and with various operating systems (e.g. Windows, Mac OS, iOS, Android). Although Flash files are not accessible on i-devices (e.g. iPads, iPhones), there are mobile apps for viewing Flash files on i-devices. HTML5 and wmv are fully supported on all i-devices and Android tablets/phones.
- ?
- WHAT IS THE COST? DO I HAVE RESOURCES TO PURCHASE OR DO I NEED A FREE PRODUCT?** How much does a product cost? Does my institution have a license? Is there an education discount or quantity discounts? Can I use a free tool? Sometimes ‘free’ is a limited version which can make for a short, less complicated learning-curve.

¹ Authors are the Leadership Team for [ADAPT](#) (Any Day Any Place Teaching), a faculty development program at the University of Texas Medical Branch from 2008-2014, funded by The University of Texas System, Office of Health Affairs.

² This document is also posted at www.utmb.edu/pediedtech/pdf/Software_for_Creating_Online_Materials.pdf

³ The software industry is rapidly changing. This guide is current as of April 2014.

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NARRATED POWERPOINT

Since Microsoft PowerPoint is a tool you already know well, you may want PowerPoint to be your starting point.

❖ **POWERPOINT 2007, 2010, 2013** have a built-in narration feature. You can find a 'Record Narration' option through the Slide Show menu. Be aware that the final file size of the .pptx is significantly increased with the addition of audio, and even more so with addition of video. Very large files are hard to share (i.e. move from one place to another) and hard to open through a browser. Fortunately, PowerPoint 2010/2013 has options to save as a .pdf file or as a .wmv video file, file formats which are smaller and can be more easily viewed from many devices and with different operating systems. *For more, [go here](#).*

Advantages.

- If you have already have PowerPoint 2007 or higher, you can make narrated PowerPoint at no additional cost.

Limitations.

- Hyperlinks will work from the .pptx or .pdf, but *not* from the .wmv.
- Embedded video will work only with 2010/2013.
- To view .pptx files on an i-device requires that the user download an app. An alternative is to save as a .wmv, so users can view more easily.
- Audio can be recorded, but not edited.
- The presentation is only navigable through a slider, not a menu.

For more information, [go here](#) for PowerPoint 2007, [go here](#) for PowerPoint 2010, or [go here](#) for PowerPoint 2013.

Narrated PowerPoint at UTMB. UTMB computers have Microsoft Office Suite installed, including PowerPoint with the narration feature.

UTMB Academic Computing has a media server (wmedia.utmb.edu) to which you can publish the .wmv file and make this available to users through a public or private url.

AUTHORING/CONVERTER TOOLS FOR INTERACTIVE NARRATED POWERPOINT

You may want to have a presentation that is more interactive than a simple narrated PowerPoint. Adding a menu allows the user control over navigation through the content. Adding quizzes allows for self-assessment or graded examination. Adding attachments provide additional resources for the user. There are several authoring tools which can create materials with such features. These PowerPoint enhancement tools are not only creative authoring tools but also converter tools, converting PowerPoint files (.ppt, .pptx) to more Internet-compatible formats such as Flash files (.swf), video files (.wmv), or HTML5 format.

DESKTOP SOLUTIONS: POWERPOINT ADD-INS

With desktop solutions, authoring/conversion software is downloaded to a local PC or Mac and becomes an add-in to PowerPoint (i.e., an extra tab is added to the PowerPoint ribbon). PowerPoint animations are preserved; navigation is available; and hyperlinks are maintained. There are options for addition of slide notes, embedded web objects, quizzes, and attachments. Narration and sound can be added by importing audio or by recording sound. Audio can be edited.

WE HAVE IDENTIFIED THREE VERY SIMILAR PRODUCTS, WITH ABOUT THE SAME FEATURES.

- ❖ **ADobe PRESENTER.** Adobe Presenter 9 content plays back in any standard web browser with Adobe Flash® Player 9 software or later, or any media player that plays MP4 files. Quiz and survey features are included, no extra software needed. Single license \$499*.
For a <10min overview, [go here](#).

Limitation.

- Flash files cannot be viewed directly on Android- or iOS-devices, But Adobe's Presenter Mobile app (free at iTunes) makes the Flash presentations accessible and usable through an Android tablet or iPad. This app does not support presentations made in versions earlier than AP8. For more, [go here](#).

Adobe Presenter 9 at UTMB. Educational discount if purchased with a purchase order through the UTMB Bookstore: single license (one PC) \$220 instead of \$499

UTMB has previously licensed Adobe Presenter 7, but will not renew after summer 2014. This product was linked to Adobe Connect videoconferencing software, a tool no longer needed at UTMB because of the institution-wide adoption of Microsoft Lync. UTMB will continue to maintain the emedia.utmb.edu server on which AP-developed modules have been published; but without AP software, editing will be difficult. Adobe Presenter can be purchased for individual use. Instead of publishing directly to the Adobe Connect server (UTMB emedia server), users can instead publish to desktop, and then import into Blackboard or website.

- ❖ **ARTICULATE PRESENTER.** Authoring tool. Presentations can be produced in either Flash or HTML5 format (i.e. accessible on i-devices and mobile-ready). \$799
 - **Articulate Studio 13 Pro.** Single license \$1398– good for two computers. Includes:
 - **Articulate Presenter.**
 - **Articulate Quizmaker**, for quizzes, surveys, including drag-and-drop questions.
 - **Articulate Engage**, with 20 interactive features. *For more, [go here](#).*
 - **Articulate Replay**, video-maker software.

Articulate Studio 13 Pro at UTMB. Educational discount if purchased with a purchase order through the UTMB Bookstore: single license (one PC) \$999 instead of \$1398.

UTMB Office of Compliance (OoC) is using Articulate Presenter for their compliance training modules. For their assessments, instead of Quizmaker, OoC uses a UTMB-licensed test-production software, Perception. UTMB Global Health Program is using Articulate Presenter to build instructional modules.

iSPRING. Presentations can be produced in either Flash or HTML5 format (i.e., accessible on i-devices and mobile-ready).

- **iSpring Presenter 7** (replacing iSpring Suite). Single license about \$697*. Can add quizzes and surveys, interactive features (e.g., 3D Book Flash books).
- **iSpring Pro.** Single license \$397. Good if you do not need a quiz tool. For another \$397, it can be combined with **iSpring Quizmaker**. The combo is about the same as getting iSpring Presenter.

iSpring has several freeware products. These allow limited features, but may do what you need.

They are also a great way to try out the iSpring products before committing to a purchase.

- **iSpring Free** is a free PowerPoint to flash converter, but not an authoring tool. It does not allow audio or video recording or insertion of interactive features, but a pre-recorded narrated PowerPoint can be uploaded.
- **Free E-Learning Suite** - compare with iSpring Presenter [here](#).
- **Free Quizmaker** - compare with iSpring Quizmaker [here](#).

iSpring at UTMB. No UTMB-wide license. Educational discount if purchased with a purchase order through the UTMB Bookstore: single license (one PC) \$675.90 instead of \$697.

CLOUD-BASED SOLUTIONS

Cloud-based solutions for enhanced PowerPoint allow for development of narrated presentations from *any* Internet-connected computer rather than a specific computer onto which software has been loaded.

Advantages.

- *Although you can start with PowerPoint presentations, you can also avoid PowerPoint altogether and instead narrate a Word or Excel file, produce a video without PowerPoint, or produce a narrated-only presentation (i.e. a podcast).*
- *Social media features allow for user commentary.*

Limitation.

- *Presentations created on cloud-based solutions are then only available from the cloud server (i.e. are not portable).*

❖ **VOICETHREAD.** Although presentations are Adobe Flash® files, there is a free app, Voicethread Mobile, for Apple-devices. Voicethreads can be private, shared with specific people, or made completely public. The unique feature of Voicethread is the audio capability of the social media option, allowing for users' narrated comments and participation using one of five audio options: microphone, webcam, text, phone, or audio-file upload.

Voicethread at UTMB. UTMB has a license for this tool. Voicethread is integrated into Blackboard and accessed through the BB log-in.

Limitation. Voicethread presentations can only be accessed through a BB course.

❖ **BRAINSHARK.** Brainshark presentations are created by uploading a file (e.g. PowerPoint slide set, Word document, Excel file, image, video) to Brainshark's cloud server, then using a phone or computer microphone to record voice narration. Video can be embedded; and attachments, polls or quizzes can be added. Presentations can be viewed on PC's, Mac's, and mobile devices, including iOS and Android. Brainshark has a social media feature, allowing text-only comments from users. Brainshark includes excellent tracking analytics. *For more, [go here](#):*

- **myBrainshark** is the free version. Presentations can be up to 100MB in size. There are limitations in interactive features and analytics.
- **Brainshark Learning Cloud** (using the Brainshark On-Demand platform) is the full version, requiring an annual subscription. The full Brainshark product also allows you to track utilization, including who viewed, what they viewed, when and where they viewed. Analytics are available through email alerts and online dashboard reports. Cost is \$20/user per month (volume discounts available), with unlimited content capacity, and unlimited private viewing by logged-in users.

SCREEN CAPTURE OPTIONS

Video capture software records everything that happens on your screen and saves it into video format to publish as an e-learning material. This could be used for a PowerPoint slide presentation, a software demonstration or website orientation. Voice narration is optional.

PERSONAL SOLUTIONS

❖ **TECHSMITH CAMTASIA RECORDER AND CAMTASIA STUDIO (V8 OR MAC V2)** are screen recording and video editing suites. Camtasia Recorder enables audio recording while screen-capturing is in progress. The resulting CAMEC file (a proprietary only readable by Camtasia) can then imported into Camtasia Studio (or Camtasia Mac V2) for editing and conversion. Sections of the recording can be enhanced by zooming, drawing on the screen, or adding labels or callouts. Audio and video files can be embedded. PowerPoint slides can be saved as images to import into Camtasia Studio. Single slides can be edited (slide or narration). The created video may be saved in many video formats including .mpeg, .wmv, and .swf Flash. Output can be viewed on most current generation mobile devices, desktop, and laptop computers

Added features: quizzes/surveys; and can add video of presenter in picture-in-picture window

Camtasia Studio 8. Educational discount if purchased with a purchase order through the UTMB Bookstore: Studio 8 PC \$235 instead of \$299. Studio MAC \$91.50 instead of \$99

❖ **ADOBE CAPTIVATE 7.** Allows the import of PowerPoint projects, including text, shapes, audio, and animations, into Adobe Captivate 7 then publishing to HTML5. Can be used for the conversion of Microsoft PowerPoint presentations to the Adobe Flash format or HTML5 format.

Free trial available. For more, [go here](#). Also, [comparison of Adobe Presenter and Adobe Captivate Features](#):

- drag-and-drop games, with audio feedback to user's actions
- quizzes

ADobe CAPTIVATE 7 at UTMB. Educational discount if purchased with a purchase order through the UTMB Bookstore: \$683 instead of \$869

ENTERPRISE SOLUTIONS

❖ **TEGRITY.** Tegrity is an enterprise (organizational) solution. A Tegrity recording captures whatever is on the computer screen, plus the audio accompanying the presentation, and saves these to a Tegrity server. Tegrity works well with a live audience in a Tegrity-enabled classroom; and it is also a good desktop solution to capture a presentation you make in the privacy of your office. Tegrity is a product which can be easily integrated into a learning management system such that recordings are automatically uploaded to the LMS course for only-enrolled students to view. (Note: Although recordings are generally accessed from within a learning management system, they also can be accessed outside of the LMS from a direct link to the Tegrity server.)

Advantages.

- Tegrity-recordings have a student-loved feature of speed setting, allowing users to speed up the presentation on playback.

Limitations.

- Cannot edit the audio; must record straight through – no pausing while recording.
- No video recording of the presenter.
- Institutions may develop retention policies for how long they will keep the presentations available.

Tegrity at UTMB. UTMB has a license for Tegrity, with software downloadable to any UTMB computer. Most of the PC's in UTMB classrooms have Tegrity already loaded. Newest PC's at UTMB have Tegrity installed, or the program can be downloaded to any UTMB PC. Presentations are saved to tegrity.utmb.edu and can be automatically loaded into a specific Blackboard course.

❖ **MICROSOFT LYNC.** Lync is an enterprise (organizational) solution for desktop conferencing.

Any Lync session can be recorded, thus creating an e-learning material. Lync recordings are .wmv files that can be edited and made available for any device or operating system.

For more, [go here](#).

Lync at UTMB. UTMB has a license for this software. It is a part of the Microsoft Office Suite, standard on UTMB computers. UTMB has a media server (wmedia.utmb.edu) to which you can publish the .wmv file and make this available to users through a public or private url.

NON-NARRATED PRESENTATIONS

Narration may not be an important feature for some e-learning materials. Sometimes narration could be a distraction to the message of the material. What, then, are your options?

ENHANCED POWERPOINT WITHOUT NARRATION

For all the enhanced PowerPoint options discussed above, narration is optional. You can still use the interactive features of navigation menus, quizzes, interactive tools, and embedded video, all without adding narration.

STARTING WITH TEXT RATHER THAN POWERPOINT

If you are not starting from PowerPoint, or if you want to convert a text document into an e-learning material, there are several solutions.

❖ **SOFTCHALK CREATE (DESKTOP VERSION 8)** enables creation of navigable and ‘chaptered’ text-based modules (called ‘lessons’). SoftChalk lessons generally begin with text (e.g. a Word document), into which can be inserted various media (video files, audio files, images). Lessons can include interactive activities, attachments, surveys, and graded assessments which can integrate with an LMS gradebook. All SoftChalk activities are mobile-friendly, using “browser detection” technology which displays the version of the activity best-suited to that browser.

- PowerPoint Option. Although PowerPoint is not a required starting point for SoftChalk, there are ways to combine PowerPoint and SoftChalk. The SoftChalk PowerPoint Integration Guide offers six options for transferring PowerPoint files into SoftChalk lessons or linking to viewable PowerPoint files.
- Narration (optional). You may decide you do want some narration. For example an introduction that gives your users a snippet of your voice, may enhance the presentation. SoftChalk allows embedding of audio or video files.
- SoftChalk Cloud is a subscription service which provides a cloud-based platform to which lessons can be easily published and URL’s provided for user access. Lessons are created locally (desktop), then published to SoftChalk Cloud Learning Registry, a repository of lessons to be shared with your learners and available to other educators. Lessons can be edited and re-saved without changing the URL.

SoftChalk at UTMB. UTMB has a site-license for an older version **SoftChalk 7**, including the Mac version of SoftChalk 7.0. Unlike SoftChalk Create (version 8), SoftChalk 7 does not create mobile-friendly lessons or use the browser detection technology. Also, the license agreement does not include SoftChalk Cloud.

FILE SHARING WHEN YOU DON'T HAVE A WEBSITE OR LMS

When you do not have a website or a learning management system from which to deliver your materials, a simple solution is cloud storage. Cloud-based storage gives you an Internet-accessible place for files, including photos, videos, and documents. You can save your e-learning materials here and share the URL for your learners' access. There are options for public viewing or selected-access viewing for those you designate.

Cloud storage also provides opportunity for file sharing and collaborative work. If a group is sharing a cloud folder and one person updates the file, everyone's files will be updated.

FREE CLOUD SOLUTIONS

We have identified three free online storage systems. For a comparison of these cloud storage devices and more, visit [Which one of these is right for me?](#)

- ❖ **MICROSOFT ONEDRIVE (PREVIOUSLY SKY DRIVE).** This product works very well with all Microsoft Office products and iPad. OneDrive automatically saves as you work (i.e. you do not have to remember to save). *For more, [go here](#).*
Possible limitation.
 - OneDrive has a limit of 2G per file. Narrated presentations could exceed this limit.
- ❖ **DROPBOX.** Includes versioning feature, to preserve previous versions of a file.
- ❖ **GOOGLE DRIVE (WHAT MANY CALL “GOOGLE DOCS”).** Pay attention to the file format. When files are uploaded to Google Drive, they are stored in a proprietary format (i.e. a Word document is not saved as a .docx); thus when you bring them back to your device, you may need to convert them. *For more information, [go here](#).*

SUBSCRIPTION-BASED CLOUD SOLUTIONS

Many tools presented above have a subscription-based cloud storage service associated with the product (e.g. **Brainshark**, **SoftChalk Cloud**, and **Adobe Presenter Cloud**).

ENTERPRISE FILE-SHARING SOLUTIONS

Your institution may have other file-sharing options.

- ❖ **XYTHOS** (created by Blackboard, but not directly linked to or requiring a Blackboard Learning Management System)

Xythos at UTMB. Xythos at UTMB is called i-Space

Table 1: What Features Do I Need?

	NARRATED POWERPOINT	ENHANCED POWERPOINT					POWERPOINT NOT REQUIRED	LECTURE CAPTURE				
		Desktop Solutions: PowerPoint Add-ins			Cloud-based solutions			Personal solutions		Enterprise solutions		
		Adobe Presenter 9	SoftChalk (non-narrated)	iSpring Presenter	Brainshark	Voicethread		Techsmith Camtasia Studio (v8 or Mac v2)	Adobe Captivate 7	Tegrity	Recorded Lync	
I want recorded narration	<input checked="" type="checkbox"/> by mic	<input checked="" type="checkbox"/> by mic	<input checked="" type="checkbox"/> by mic	<input checked="" type="checkbox"/> by mic	<input checked="" type="checkbox"/> by mic, phone, mp3 upload	<input checked="" type="checkbox"/> by mic	No recording feature, can embed audio	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> by mic	<input checked="" type="checkbox"/> by mic	
I want to be able to edit the narration or re-record a single slide	only can re-record	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	NA	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	no	no	
I want a non-narrated presentation	-	Good choice	Good choice	Good choice	-	-	Good choice	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	-	
I want to embed video	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
I want to show Slide Text Notes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> comments	No slides, presentation is text	no	<input checked="" type="checkbox"/>	no	no	
Interactive features												
Navigation Menu so users are in control of where to go	no	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Limited (slider)	<input checked="" type="checkbox"/>	no	<input checked="" type="checkbox"/>	Limited (slider)	no	
Hyperlinks will work within the presentation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> With hotspots	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> projected in a sidebar	no	
Added attachments	no	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	no	<input checked="" type="checkbox"/>	no	no	
Learner self-assessment (non-graded quizzes) or evaluation surveys	no	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Quizmaker, part of Studio 13, or purchased separately to use with AP	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	no	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	no	no	
Viewers can add comments (social media aspects)	no	no	<input checked="" type="checkbox"/> Cloud version only	no	<input checked="" type="checkbox"/> Text-only option	<input checked="" type="checkbox"/> Text or Audio options	no	no	<input checked="" type="checkbox"/>	no	No	

Table 1: What Features Do I Need?

Table 2: Cost? Do I have resources to purchase or do I need a free product?

	NARRATED POWERPOINT	ENHANCED POWERPOINT					POWERPOINT NOT REQUIRED	LECTURE CAPTURE				
		Desktop Solutions: PowerPoint Add-ins			Cloud-based solutions			Personal solutions		Enterprise solutions		
		Adobe Presenter 9	Articulate Presenter	iSpring Presenter	Brainshark	Voicethread		Techsmith Camtasia Studio v8 or Camtasia Mac V2	Adobe Captivate	Tegrity	Lync	
	Feature within PowerPoint 2007,2010,2013	\$499	AP-alone \$799 Studio 13 \$1398	\$697	Requires monthly subscription	UTMB licenses	UTMB licenses	Studio 8 PC \$299 Camtasia Mac V2 \$99	\$869	UTMB licenses	UTMB licenses	
	<i>Check for institutional educational discounts and volume discounts</i> UTMB Bookstore discount	NA	\$220	AP \$537.70 Studio 13 \$999	\$675.90	--	--	Studio 8 PC \$235 Camtasia Mac V2 \$91.50	\$683	---	---	

Table 2: Cost?