
Resources for Using Technology to Enhance Professional Development, Technical Assistance, and Dissemination Activities



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NOTE: This handout is one of the materials that accompany a two-day workshop that I lead on using technology to enhance the efficiency and effectiveness of service delivery, professional development, technical assistance, and dissemination activities.

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This session is designed to stimulate our thinking about how we might adopt, adapt, combine, repurpose, and use technology to innovatively support our constituencies. It will illustrate a number of tried-and-true and emerging technologies that can help us effectively and efficiently provide professional development activities, support performance, disseminate information, and provide technical assistance.

Please note:

I constantly update this handout to try to keep it as up-to-date as possible with emerging developments and information. Please send me links to sources of relevant information so I can share them with others.

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Avoid Seagull Events (fly in, drop something, fly out)

Use technology to help extend how you support learning and performance *over time* rather than focusing solely on solitary F2F events



How might you use technology...		
BEFORE a professional development event to: Get a better sense of the learners, their needs and concerns; help the learners prepare for the learning experience; help you understand and address potential barriers to the learners' implementation of new skills; etc.	DURING a professional development event to: Connect learners to new resources; create learning networks; bring in speakers from a distance; encourage action planning; anticipate implementation back-on-the-job; evaluate the training; etc.	AFTER a professional development event to: Evaluate training; encourage self-reflection; provide technical assistance and/or coaching; provide additional information; support implementation and performance back-on-the-job, etc.
Moral: ALWAYS think in sets of three: what is the activity at hand, what comes before it, and what happens afterwards.		



Key Questions

To help determine the fit and feasibility of using new media for delivering professional development and technical assistance

What is the capacity of YOUR ORGANIZATION to produce and distribute the media?

To what extent is the new media a sound choice for delivering your specific INSTRUCTIONAL CONTENT in terms of:

- ☐ The KNOWLEDGE that you want your audience to attain?
- ☐ The ATTITUDES that you want your audience to have?
- ☐ The SKILLS that you want your audience to be able to perform?
- ☐ The actual PERFORMANCE that you desire back on the job?

In general, to what extent is the proposed new media COMPATIBLE with your organization and the department in which you are located in terms of:

- ☐ Budget
- ☐ Organizational culture
- ☐ Logistical resources
- ☐ Technology
- ☐ IT Policy

To what extent does your organization have access to (or have the ability to recruit) the required HUMAN RESOURCES?


- ☐ Project manager who can oversee the design, development, dissemination, implementation, and evaluation of the media
- ☐ Training personnel who have the instructional design knowledge to “package” the content effectively in the new instructional format
- ☐ Technical personnel who have (or can attain) the know-how and skills to create the media
- ☐ Information Technology personnel to help design and support the posting, dissemination, and maintenance of the media
- ☐ Evaluators to help design and implement an evaluation system of the media and learner’s performance
- ☐ Technical assistance personnel to provide users with support
- ☐ Administrative support staff for logistical maintenance

To what extent does your organization have ACCESS to (or have the ability to obtain) the required computer resources?

- ☐ Hardware
- ☐ Software
- ☐ Internet connection and bandwidth

What is the capacity of <u>YOUR AUDIENCE</u> to use the media?	
Required Hardware, Software, Bandwidth, and Access	
To what extent does your intended audience have adequate access to (or the ability to acquire) the required computer resources:	
Hardware (Specify)	<input type="checkbox"/> All do <input type="checkbox"/> Most do, <input type="checkbox"/> Some do, some don't <input type="checkbox"/> Most don't <input type="checkbox"/> All don't <input type="checkbox"/> Not sure Implications:
Software (Specify)	<input type="checkbox"/> All do <input type="checkbox"/> Most do, <input type="checkbox"/> Some do, some don't <input type="checkbox"/> Most don't <input type="checkbox"/> All don't <input type="checkbox"/> Not sure Implications:
Internet connection and bandwidth (Specify)	<input type="checkbox"/> All do <input type="checkbox"/> Most do, <input type="checkbox"/> Some do, some don't <input type="checkbox"/> Most don't <input type="checkbox"/> All don't <input type="checkbox"/> Not sure Implications:
Access to web sites (e.g. no restrictions)	<input type="checkbox"/> All do <input type="checkbox"/> Most do, <input type="checkbox"/> Some do, some don't <input type="checkbox"/> Most don't <input type="checkbox"/> All don't <input type="checkbox"/> Not sure Implications:
Computer Literacy	
To what extent does your intended audience have the computer literacy required to:	
Navigate the WWW	<input type="checkbox"/> All do <input type="checkbox"/> Most do, <input type="checkbox"/> Some do, some don't <input type="checkbox"/> Most don't <input type="checkbox"/> All don't <input type="checkbox"/> Not sure Implications:
Download software and files	<input type="checkbox"/> All do <input type="checkbox"/> Most do, <input type="checkbox"/> Some do, some don't <input type="checkbox"/> Most don't <input type="checkbox"/> All don't <input type="checkbox"/> Not sure Implications:
Use media players	<input type="checkbox"/> All do <input type="checkbox"/> Most do, <input type="checkbox"/> Some do, some don't <input type="checkbox"/> Most don't <input type="checkbox"/> All don't <input type="checkbox"/> Not sure Implications:
Troubleshoot or obtain help when encountering problems	<input type="checkbox"/> All do <input type="checkbox"/> Most do, <input type="checkbox"/> Some do, some don't <input type="checkbox"/> Most don't <input type="checkbox"/> All don't <input type="checkbox"/> Not sure Implications:

Acceptability	
To what extent might your intended audience PERCEIVE the media to be acceptable in terms of:	
How it compares with the ways that they have been receiving training in the past?	Acceptable: <input type="checkbox"/> To all <input type="checkbox"/> To most <input type="checkbox"/> To some, not others <input type="checkbox"/> Not to most <input type="checkbox"/> Not to all <input type="checkbox"/> Not sure Implications:
It being an effective way to learn?	Acceptable: <input type="checkbox"/> To all <input type="checkbox"/> To most <input type="checkbox"/> To some, not others <input type="checkbox"/> Not to most <input type="checkbox"/> Not to all <input type="checkbox"/> Not sure Implications:
Having adequate (paid) time to use it?	Acceptable: <input type="checkbox"/> To all <input type="checkbox"/> To most <input type="checkbox"/> To some, not others <input type="checkbox"/> Not to most <input type="checkbox"/> Not to all <input type="checkbox"/> Not sure Implications:
It being complex or difficult to understand and/or use?	Acceptable: <input type="checkbox"/> To all <input type="checkbox"/> To most <input type="checkbox"/> To some, not others <input type="checkbox"/> Not to most <input type="checkbox"/> Not to all <input type="checkbox"/> Not sure Implications:
Knowing that they will have access to support to solve problems?	Acceptable: <input type="checkbox"/> To all <input type="checkbox"/> To most <input type="checkbox"/> To some, not others <input type="checkbox"/> Not to most <input type="checkbox"/> Not to all <input type="checkbox"/> Not sure Implications:
Having ways to evaluate the results of using it and giving feedback?	Acceptable: <input type="checkbox"/> To all <input type="checkbox"/> To most <input type="checkbox"/> To some, not others <input type="checkbox"/> Not to most <input type="checkbox"/> Not to all <input type="checkbox"/> Not sure Implications:

Recent shifts in my thinking	
From  To	
Supporting Performance	
providing PD and TA	supporting performance
knowledge based (what was)	problem-based (what is)
preparation	just-in-time
expert-facilitated	learner (performer)-directed
instruction	navigation
comprehensive curriculum	pliable learning objects
Products	
proprietary	open content
unique	modular
Strategies	
summative evaluation	frequent data collection
long-term development	rapid production
use what I know	learn new skills
“best” strategy	integrating applications
IT as limiting	IT as enabling
ideas	execution



Key Technologies You NEED to Know About

In this section are examples of key applications that you should know about. Please note: I update this document frequently. The links below were active on **February 26, 2011** but they may become inactive over time.

Online Surveying

A Survey of Survey Tools: http://www.wac.ohio-state.edu/workshops/survey_of_surveys/

Survey Monkey: www.SurveyMonkey.com

Survey Gizmo: <http://www.surveygizmo.com/>

Note: above examples cited because of positive accessibility ratings.

Marketing Resources

Constant Contact: <http://www.constantcontact.com/index.jsp>

Ratepoint: <http://www.ratepoint.com>

Podcasts

The word "podcast" combines the words iPod and broadcast. It refers to the delivery of content via the Apple iPod or related audio player. Podcasting is a way of publishing podcasts to the web, allowing people to subscribe to a podcast and receive new "episodes" automatically.

Examples of Podcasts:

Science Podcast: <http://www.sciencemag.org/cgi/content/full/323/5910/145b>

Recent Elliott Masie podcasts, visit: <http://masieweb.com/Home.htm>

ASHA Podcast Series: <http://podcast.asha.org/>

Podcasts on children's health and interviews with children's health experts:

<http://www.podcastdirectory.com/podcasts/index.php?iid=7843>

Exploring the Tools of Internet Technology: A Series of Podcasts for Trainers & Educators:

<http://www.rfccnetwork.org/content/view/418/47/>

Podcast series by FPG Child Development Institute (FPG) www.fpg.unc.edu/news/podcasts.cfm

Early Hearing Detection and Intervention: <http://www2a.cdc.gov/podcasts/player.asp?f=5834>

Here's a cool resource on how to use podcasts: <http://www.podcastdirectory.com/help/>

Case study of a company that is using Podcasts for audio learning, visit:

http://www.gronstedtgroup.com/pdf/T_D_September_05.pdf

ProfCast: <http://www.profcast.com/public/index.php>

What is RSS?:

http://www.usa.gov/Topics/Reference_Shelf/Libraries/RSS_Library/What_Is_RSS.shtml

RSS in Plain English: <http://www.youtube.com/watch?v=0klqLsSxGsU>

Some examples of the ways that video is being used

- Results Matter Video Library:
<http://www.cde.state.co.us/resultsmatter/RMVideoSeries.htm>

(see section on QR codes below)



- Desired Results access Project Digital Video Initiative:
<http://www.draccess.org/videoinitiative/>



- The Center on the Social and Emotional Foundations for Early Learning (CSEFEL) Videos:
<http://csefel.vanderbilt.edu/resources/videos.html>
- Technical Assistance Center on Social Emotional Intervention for Young Children (TACSEI) Pyramid Model Story Project:
http://www.challengingbehavior.org/do/pyramid_model/pyramid_model_story_project.html
- SpecialQuest Multimedia Training Library:
<http://76.249.171.46/specialquest/trainingmaterials/searchvideos.lasso>
- Head Start Center for Inclusion Videos: <http://depts.washington.edu/hscenter/videos>
- Washington Sensory Disabilities Services Video Topics:
<http://www.wsdsonline.org/deafblind/space/>
- Center for Early Literacy Learning (CELL) Videos:
http://www.earlyliteracylearning.org/ta_pract_videos1.php
- Autism Speaks ASD Video Glossary: <http://www.autismspeaks.org/video/glossary.php>
- Reading Rockets Videos and Podcasts: <http://www.readingrockets.org/podcasts>
- Guiding Young Children's Behavior: A Project Navigate Training:
http://www.easternct.edu/cece/guidance_training.html
- Videatives: <http://www.videotives.com/>
- Integration of an article (text) that someone wrote, supported by a video that I produced:
<http://www.thejournal.com/articles/23981>
- Go to college at YouSeeBerkely. University of California, Berkeley this began making its course lectures and special events freely available on YouTube:
<http://youtube.com/ucberkeley>

- YouTubeEDU: <http://www.youtube.com/edu>
- CA State government YouTube channel: <http://www.youtube.com/californiagovernment>
- Science Magazine: http://www.sciencemag.org/education_technology/
- The Infinite Thinking Machine: Video podcasts for educators and students: <http://www.infinitethinking.org/shows.htm>
- FPG Abecedarian Project - Source: FPG Child Development Institute - May 6, 2008: http://www.fpg.unc.edu/%7Eabc/fpg_abc-video.cf
- dotSUB: a tool gives anyone the ability to translate video content into multiple languages via subtitles rendered over the bottom of the video. <http://dotsub.com/about/>
- CDC-TV has just released a new video in its "Health Matters" series entitled "Baby Steps: Learn the Signs. Act Early." <http://www.cdc.gov/CDCtv/BabySteps/>
- Using video to share conference proceedings: <http://www.youtube.com/user/gregaloha#grid/user/209BAC7DAACFEDBC>

Media Sharing Sites

Examples of Providers:

- YouTube: <http://www.youtube.com/>
- Vimeo: <http://www.vimeo.com/>
- Screencast.com: <http://www.techsmith.com/screencast.asp>
- TeacherTube: <http://www.teachertube.com/>
- *SchoolTube*: <http://www.schooltube.com/>
- Ustream:: <http://www.ustream.tv/>
- Viddler: <http://www.viddler.com/>
- Open Source Movies: http://www.archive.org/details/opensource_movies
- MetaCafe: <http://www.metacafe.com/>
- Buzdeo: <http://www.buzdeo.com/>
- Bubbleshare: <http://www.bubbleshare.com/>
- Flickr: <http://www.flickr.com/>
- Picasa: <http://picasa.google.com/>
- Creative Cow: <http://www.creativecow.net/>
- Veoh: <http://www.veoh.com/>

Lists and comparisons of video posting sites:

<http://chaos-laboratory.com/2007/08/30/top-31-free-alternatives-to-youtube-video-hosting-sites/>
<http://www.dvguru.com/2006/04/07/ten-video-sharing-services-compared/>
<http://www.squidoo.com/videohosting>

QR (Quick Response) Codes

(See examples in video section above)

- What is a QR code and how can they be used in education: <http://www.dontwasteyourtime.co.uk/qr-codes/qr-codes-the-nuts-and-bolts/>
- 101 Uses For Quick Response (QR) Codes: <http://blog.greattv.com/2010/06/101-uses-for-quick-response-qr-codes-creating-audience-engagement-with-the-next-killer-us-app/>
- myQR (URL shortener and QR code generator rolled into one): <http://myqr.co/>
- Kaywa QR generator: <http://qrcode.kaywa.com/>

Class/Lecture Capture

Examples of Applications (each has examples on their site):

- Tegrity: <http://www.tegrity.com>
- Echo 360: www.echo360.com
- CourseCast from Panopto: <http://www.panopto.com/>

Applications for Creating Quick elearning Modules

A growing number of software applications enable the quick creation of elearning modules. Many, but not all of these applications, use the conversion of PowerPoint files with added narration to flash video to create, quick, inexpensive online learning modules or tutorials. Many applications offer demos and a free trial period. Be cautious: avoid purchasing based on price – shop for functionality and compatibility with your current IT resources.

Articulate: Articulate (my favorite) offers free half-hour Webinar explaining their product. <http://www.articulate.com/>

For examples of its use: <http://www.articulate.com/community/showcase/>

In my work with California's Desired Results access Project and the California Department of Education's Special Education Division, we developed a 6.5 hour face-to-face instructor-led training program on how to use an assessment instrument, the DRDP access, in preschool special education. In addition to delivering the session across the state, we used Articulate to "convert" the session to five online modules that can each be completed in about 10 minutes. These modules were developed for those who have not had the opportunity to participate in face-to-face training sessions, those who prefer to learn online, and for those who attended a training session but would like a refresher. In particular, I would recommend that you check out the last two, Module 4: Practice Rating the DRDP access and New! Module 5: Using Adaptations with the DRDP Instruments as they demonstrate different ways that Articulate can be used to create interactive learning experiences using rich media. You can access these modules from our portal: <http://www.draccess.org/training/learningmodules.html>

Examples from CT Birth to Three:

<http://www.birth23.org/Determinations/player.html>

<http://www.birth23.org/timelines/engage.html>

Camtasia Studio 6: <http://www.techsmith.com/camtasia.asp>

Product Tour: <http://www.techsmith.com/camtasia/features/win/>

Tutorials: <http://www.techsmith.com/learn/camtasia/default.asp>

Learning center: <http://www.techsmith.com/learn/camtasia/documentation.asp>

Users Group: <http://camtasia.ning.com/>

Examples of the use of Camtasia:

Technical Assistance Center on Social Emotional Intervention with Young Children:

http://www.challengingbehavior.org/explore/camtasia/pyramid_overview/pyramid_overview_captions.html

CADRE: <http://www.directionservice.org/cadre/DataDrillTool.cfm#>

Adobe Captivate and Presenter: <http://www.adobe.com/products/captivate/> and

<http://www.adobe.com/products/presenter/>

Example of Captivate from CADRE: <http://www.directionservice.org/cadre/listening.cfm#>

PowerCONVERTER 5.2:

<http://www.crystalgraphics.com/powerpoint/powerconverter.main.asp?p=empconvert52e2>

KnowledgePresenter: <http://www.knowledgepresenter.com/assets/home.htm>

Helius Presenter: <http://www.helius.com/solutions/trainingandlearning.php>

iSpring: <http://www.ispringsolutions.com/>

Impatica: <http://www.impatica.com/offers/google1/?qclid=CI2uytOX5pUCFRxNagodHn5Iew>

IncrediTools PPT to Flash Studio: <http://www.increditools.com/>

WildPresenter Pro: <http://www.wildform.com/>

Examples of Custom-Built Online Learning Systems

Computer-based multimedia blends text, images, sound, and color to create easily accessible, interactive information delivery systems. Multimedia can be anything from a simple PowerPoint slide show to a complex interactive simulation.

Evaluating Online Learning from the U.S. Department of Education:

<http://www2.ed.gov/admins/lead/academic/evalonline/evalonline.pdf>

Examples:

- CONNECT: The Center to Mobilize Early Childhood Knowledge: <http://community.fpg.unc.edu/connect-modules>
- Texas (Part C) Early Childhood Intervention (ECI) web-based training modules: <http://www.dars.state.tx.us/ecis/providers/providertraining.shtml>
- Check out Maryland's Early Childhood Tutorial, an online educational tool developed through a partnership between the Maryland State Department of Education, Division of Special Education/Early Intervention Services and Johns Hopkins University, Center for Technology in Education: <http://olms.cte.jhu.edu/olms/output/page.php?id=1214>
- The Code: <http://www.childrenofthecode.org/Tour/index.htm>
- Minnesota Council on Developmental Disabilities' Five Partners in Policymaking online courses: <http://www.mnddc.org/news/newsitems/bow-award07.htm>
- Jellyvision does some cool things: <http://www.JellyvisionLab.com/examples.php>

Miscellaneous eLearning Examples

To get inspired when designing an elearning program it sometimes helps to browse a variety of applications and approaches to instruction. The list below should provide some stimulation!

- <http://www.articulate.com/blog/where-are-examples-of-elearning-lots-right-here/>
 - <http://www.articulate.com/community/showcase/>
 - <http://blog.cathy-moore.com/elearning-samples/>
 - <http://blog.cathy-moore.com/2010/05/elearning-example-branching-scenario/>
 - <http://elearningtech.blogspot.com/2007/10/elearning-examples.html>
 - <http://www.suddenlysmart.com/examples.htm>
 - <http://mylifeismylab.wordpress.com/2007/06/28/examples-of-e-learning/>
 - <http://learncontext.blogspot.com/2007/06/two-examples-of-e-learning.html>
 - <http://elearningexamples.com/>
 - <http://www.c4lpt.co.uk/Showcase/100anything.html>
 - <http://www.c4lpt.co.uk/Showcase/100langlearning.html>
 - <http://www.c4lpt.co.uk/Showcase/100business.html>
 - Answering Clinical Questions with Evidence: <http://connect.ucdenver.edu/evidence>
- Source for many of these sites: <http://elearningtech.blogspot.com/>

Video Conferencing, Messaging, VoIP

Free or Low-cost Desktop Solutions:

- Skype: <http://www.skype.com>
- Oovoo: <http://www.oovoo.com/>
- Google Video and Chat: <http://www.google.com/mail/help/videochat/learnmore.html>
- iChat (mac): <http://www.ichat.com/>
- AIM: <http://www.aim.com/>
- Meebo: <http://www.meebo.com/>
- Tinychat: <http://tinychat.com/>
- SightSpeed (Logitech): <http://www.sightspeed.com/>
- VZOchat: <http://vzochat.com/en/Default.aspx>

Higher End Systems:

- Polycom: <http://www.polycom.com/index.html?showme=y>
- Cisco: <http://www.cisco.com/en/US/products/hw/video/ps1870/>

Other resources on Video Conferencing, Messaging, VoIP:

- VoIP: <http://www.fcc.gov/voip/> <http://en.wikipedia.org/wiki/VoIP>

- Bringing Composers into Classrooms through Skype: <http://www.thejournal.com/articles/23197>
- Best Free Video Conferencing Tools: <http://www.masternewmedia.org/best-video-conferencing-tools-free-low-cost-one-to-one-and-multi-party-solutions-mini-guide/>
- Videoconferencing for Deaf Students: <http://thejournal.com/articles/2009/06/17/videoconferencing-broadening-horizons-for-ksd-deaf-students.aspx>

Online Meeting Spaces

Many companies offer integrated online meeting facilities that can be used for online collaboration and the presentation and/or demonstration of information. Different companies offer different features - one can usually expect visuals, one and two way calls, real-time question and answer capabilities, participant registration, downloads, surveying/polling, technical assistance, facilitation services, and live chat.

Webcast: To use the Internet to broadcast live or delayed audio and/or video transmissions, much like traditional television and radio broadcasts (AKA netcast)

Webinar: Short for Web-based seminar, a presentation, lecture, workshop or seminar that is transmitted over the Web. A key feature of a Webinar is its interactive elements -the ability to give, receive and discuss information. Contrast with Webcast, in which the data transmission is one way and does not allow interaction between the presenter and the audience.

(<http://www.webopedia.com/>)

Examples of Systems/Companies:

- GoToMeeting, GoToWebinar , GoTo Assist (Citrix): <http://www.citrixonline.com/>
- WebEx: <http://www.webex.com/>
- Adobe Acrobat Connect Professional: <http://www.adobe.com/products/acrobatconnectpro/>
- iLink: <http://www.ilinc.com/>
- Elluminate: <http://www.illuminate.com/index.jsp>
- Sonic Foundry's Mediasite (also can do class capture): <http://www.sonicfoundry.com/>
- Microsoft Office Live Meeting: <http://office.microsoft.com/en-us/livemeeting/default.aspx>
- CineMeetings (uses a network of more than a thousand theaters nationwide to host broadcasts): <http://www.nationalcinemedia.com/Cinemeetings/>
- Bridgit conferencing software: <http://www2.smarttech.com/st/en-US/Products/Bridgit/>
- DimDim: <http://www.dimdim.com/>
- Fuze: <http://www.fuzemeeting.com/>

Examples:

February 19, 2009 - SPDG Directors' Webinar: Using Technology for Professional Development, Technical Assistance, and Strategic Communication: http://www.signetwork.org/content_pages/46

September 17, 2009: Free Applications You Should know About:

http://www.tadnet.org/news_posts/13

Archived presentation from NECTAC:

- <http://www.nectac.org/~calls/2007/challengingbehavior/challenge.asp>

Moving Right Along...Planning Transitions to Prevent Challenging Behavior with Mary Louise Hemmeter, Michaelene M. Ostrosky, Kathleen M. Artman, and Kiersten A. Kinder:

- <http://journal.naeyc.org/btj/200805/hemmeter.asp>

Alliance for Health Reform's Children's Health Coverage (February 02, 2009)

http://allhealth.org/briefing_detail.asp?bi=144

Webcasts from the National Symposium on Early Childhood Science and Policy:

http://www.developingchild.harvard.edu/content/national_symposium.html

Broadreach Conference Center (live and pre-recorder *webinars, tele-classes, and online discussions* with Norman Kunc and Emma Van der Klift:

<http://www.normemma.com/conferencecenter/index.htm>

Course Management System (CMS), Learning Management System (LMS), Virtual Learning Environment (VLE)

Examples of Systems/Companies:

- Moodle is an open source course management system: <http://moodle.org/>
- Joomla: <http://www.joomla.org/>
- Blackboard – one of the most well-known providers. Note: WEBCT merged with Blackboard and retains its identity, but resides under the Blackboard brand: <http://www.blackboard.com>
- Desire2Learn: <http://www.desire2learn.com/>
- Sharepoint: <http://www.microsoft.com/Sharepoint/default.mspx>
- eFront: <http://www.efrontlearning.net/>
- Learning Management System (LMS) Selection, Features, and Barriers: <http://elearningtech.blogspot.com/2007/09/lms-satisfaction-features-and-barriers.html>
- Open Source LMS Info: http://elearningtech.blogspot.com/2009/12/open-source-lms.html?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+ElearningTechnology+%28eLearning+Technology%29
- Read more about VLEs at: http://en.wikipedia.org/wiki/Virtual_learning_environment

Communities of Practice

CoP refers to the process of social learning that occurs and shared socio-cultural practices that emerge and evolve when people who have common goals interact as they strive towards those goals. http://en.wikipedia.org/wiki/Communities_of_Practice

- Communities of Practice (CoPs) that are supported by the Technical Assistance and Dissemination (TA&D) Network and the Office of Special Education Programs (OSEP): <http://www.tacomunities.org/>

Multiuser Virtual Learning Environment (MUVE)

Examples of Systems/Companies:

- Second Life: <http://secondlife.com/>
- Second Life Educator Wiki:
http://www.simteach.com/wiki/index.php?title=Second_Life_Education_Wiki
- Introduction to Second Life and Its Educational Possibilities:
<http://www.slideshare.net/jokay/introduction-to-second-life>

Example:

- ihum_2006 shows projects by Stanford University students in Second Life for Introduction to the Humanities 57: The Human & the Machine. http://www.archive.org/details/ihum_2006

Blogs

Short for "Web logs," online journals, personal commentaries posted by the author, which usually are updated on a regular basis. It has been estimated that 6 million people posted their blogs on the Internet in 2004.

Examples of Blogs:

My blog of free applications: <http://exploringtech.wordpress.com/>

eLearning Technology: <http://elearningtech.blogspot.com/>

CEC's RTI blog: <http://cecblog.typepad.com/rti/>

ReadWriteWeb is a blog that provides Web Technology news, reviews and analysis:
<http://www.readwriteweb.com/>

Teacher Magazine's look at what's new and noteworthy in educator blogs.

<http://blogs.edweek.org/teachers/blogboard/>

Look at Miss CripChick's blog for an example of how blogs can be used for advocacy:

<http://crip-power.com/>

Robin McWilliam's Early Intervention in Natural Environments Blog

<http://www.naturalenvironments.blogspot.com/>

Welcome to The 2007 Weblog Awards (for Education Blogs)

<http://2007.weblogawards.org/polls/best-education-blog-1.php>

Welcome to the Blogosphere

<http://www.infinitethinking.org/2006/12/itm-4-welcome-to-blogosphere.html>

TheWeblogProject open-source movie documentary about blogs and bloggers. <http://www.theweblogproject.com/>

Top ELearning Blogs: <http://thedailyreviewer.com/top/eLearning>

Top 99 Workplace eLearning Blogs (Tony Karrer):

<http://elearningtech.blogspot.com/2009/08/top-99-workplace-elearning-blogs.html>

Mistakes made in Academic Blogs:

<http://www.dontwasteyourtime.co.uk/web-20/mistakes-made-in->

[academic-blogs/](#)

Top Ten Reasons Why You Should Blog and Top Reasons Why You Shouldn't or Won't Blog: <http://elearningtech.blogspot.com/2006/10/top-ten-reasons-to-blog-and-top-ten.html>

Microblogging:

- Twitter: <http://twitter.com/>
- Example of how educationweek is using Twitter: <http://twitter.com/educationweek>

Vlogs

Short for video blog, it is the term used to describe a blog that includes or consists of video clips. Typically updated daily (or with regular frequency) vlogs often reflect the personality or cause of the author; aka vog) <http://www.webopedia.com/>

- Welcome to vlogs: <http://www.archive.org/details/vlogs>

Wikis

A wiki is computer software that allows users to easily edit, create, and link web pages. Wikis are often used to create collaborative websites, power community websites, and are increasingly being installed by businesses to provide affordable and effective Intranets or for use in Knowledge Management.

Examples:

- The Wikimedia Foundation, Inc. is the non-profit parent organization of various free-content projects, most notably Wikipedia, the award-winning online encyclopedia. Here, you will find videos of conferences, talks and presentations related to the Wikimedia projects: <http://www.archive.org/details/wikimedia>
- Wikipedia: http://en.wikipedia.org/wiki/Main_Page
- LearningWiki: <http://www.learningwiki.com>
- PB Wiki (Create your own wiki in 60 seconds): <http://pbwiki.com/>
- The National Professional Development Center on Inclusion (NPDCI) recently launched a "wiki" to collectively define key terms related to professional development. <http://community.fpg.unc.edu/discussions/wiki-pd-approaches>
- Brush Public Schools Curriculum Wiki: http://wiki.brushschools.org/index.php/Main_Page

Online Consultation

- My Teaching Partner: http://www.myteachingpartner.net/about/about_consultancy.php

Social Networking

Examples of social utilities and networks:

- FaceBook: <http://www.facebook.com/>
- LinkedIn: <http://www.linkedin.com/>
- Ning: <http://www.ning.com/>
- Seesmic (Video Social networking): <http://www.seesmic.com/>

Social Bookmarking Sites

- Delicious: <http://delicious.com/>
- Diigo: <http://www.diigo.com/>
- Furl: <http://www.furl.net/>
- Blinklist: <http://www.blinklist.com/>
- Ma.gnolia: <http://ma.gnolia.com>
- Slashdot: <http://slashdot.org>
- Digg: <http://digg.com>
- FriendFeed: <http://friendfeed.com/>

Collaborative spaces

- Google docs: <http://docs.google.com>
- Wiggio: <http://wiggio.com/>
- Adobe Buzzword: <http://www.adobe.com/acom/buzzword/>
- Convore: <https://convore.com/>
- Writeboard: <http://www.writeboard.com/>
- Scriblink: <http://www.scriblink.com/>
- Zoho: <http://www.zoho.com/index.html>
- VoiceThread: <http://voicethread.com/>
- Mixed Ink: <http://mixedink.com/main.php>
- PBworks: <http://pbworks.com/>

PowerPoint Uploading and Sharing

- SlideShare: <http://www.slideshare.net/>
Example: <http://www.slideshare.net/LarryEdelman123/free-applications-we-should-know-about>
- SlideStory: <http://www.slidestory.com>
- MyPlick; <http://www.myplick.com/>
- SlideBoom: <http://www.slideboom.com/>
- SlideServe: <http://www.slideserve.com/>
- 280slides: <http://280slides.com/>
- Google Presentation: <http://docs.google.com/>
- Zoho Show: <http://show.zoho.com/>
- PowerShow: <http://www.powershow.com/>
- AuthorStream: <http://authorstream.com/>
- SlideRocket: <http://www.sliderocket.com/>
- Scribd: <http://www.scribd.com/>

Presentation Tools

- Prezi: <http://prezi.com/>
Examples:
<http://prezi.com/afxouwwjfc5g/>
<http://prezi.com/nguavi-ivcbb/>
<http://prezi.com/showcase/>
- Animoto: <http://animoto.com/#learn-more>
Examples:
<http://animoto.com/play/TtdEhQI7ORcNurpOk3s0Pw?autostart=true>
<http://animoto.com/play/z8h0owmA8IqEMNFq0kY7Jg>
- Slide Rocket: <http://www.sliderocket.com>
- Voicethread: <http://voicethread.com>
- 280 Slides: <http://280slides.com/>
- SlideShare: <http://www.slideshare.net/>
- Slideboom: <http://www.slideboom.com/>
- Zentation: <http://zentation.com>
- Smilebox: <http://www.smilebox.com/>
- One True Media: <http://www.onetruemedia.com/>

News and What's New

- Stumbleupon: <http://www.stumbleupon.com>
- Newsline: <https://www.newsvine.com>
- Reddit: <http://www.reddit.com>
- Fark: <http://www.fark.com>

Knowledge Sharing

- Knol: <http://knol.google.com/k/>
- Graspr: <http://www.graspr.com/>

Interesting Education, Early Childhood Sites

- CONNECT: The Center to Mobilize Early Childhood Knowledge: <http://community.fpg.unc.edu/connect-modules>
- IRIS Center: <http://iris.peabody.vanderbilt.edu/>
- The Professional Training Resource Library (PTRL): http://depts.washington.edu/isei/ptrl/PTRL_Purpose.php
- SpecialQuest Multimedia Training Library: <http://76.249.171.46/specialquest/trainingmaterials/index.lasso>
- Public Education Some 33,000 children in British Columbia have enrolled in a nearly three-year-old online K-12 school with a curriculum that allows students to work at their own pace: <http://www.learnnowbc.gov.bc.ca/>
- Our History: <http://americanhistory.si.edu/ourstoryinhistory/tryonline/buildsodhouse.html>
- iCue: <http://www.icue.com/>
- The Baby Center: <http://www.babycenter.com/>

Open Content

- The Institute for the Study of Knowledge Management in Education's OER Commons: <http://www.oercommons.org/>
- Teachnology: <http://www.teachnology.com/>
- Multimedia Educational Resources for Learning and Online Teaching (MERLOT): www.merlot.org/
- Connexions: <http://cnx.org/>
- KEEP Toolkit: <http://www.cfkeep.org>
- ❑ Many Books: www.manybooks.net
- ❑ SpinXpress: www.spinxpress.com
- ❑ Academic Earth: <http://academicearth.org/>
- ❑ Open Courseware Consortium: www.ocwconsortium.org
- ❑ Stanford Engineering Everywhere: <http://see.stanford.edu>
- ❑ UC Princeton: <http://uc.princeton.edu>
- ❑ MIT Opencourseware: <http://ocw.mit.edu>
- ❑ OpenLearn: www.openlearn.open.ac.uk
- ❑ YouTube Edu: www.youtube.com/edu
- ❑ Ck-12: www.ck12.org/index.html
- ❑ iTunes Podcasts: <http://www.apple.com/itunes/features/#podcasts>
- ❑ Khan Academy: <http://www.khanacademy.org/>
- ❑ Many Books: www.manybooks.net
- ❑ SpinXpress: www.spinxpress.com
- ❑ Open Content: http://opencontent.org/wiki/index.php?title=Main_Page
- ❑ HP Learning Center: <http://h30187.www3.hp.com/?hplcpsession.id=617e96a9cf356a94296ba4a88111&tab=allClasses>
- ❑ Latitude U Free courses: <http://www.latitudeu.com/home.aspx>
- ❑ EDUCAUSE Learning Initiative's (ELI's) *7 Things You Should Know About...* series provides concise information on emerging learning technologies and related practices: <http://www.educause.edu/7Things>
- ❑ 20 Free Educational Video Sites: <http://blog.curriki.org/2010/07/13/watch-and-learn/>
- ❑ Curriki: Curriki.org
- ❑ Heilbrunn Timeline of Art History: <http://www.metmuseum.org/toah/>

Free Apps to Enhance Professional Development, Technical Assistance, and Dissemination

Download this rich handout that lists free apps: *Free Applications –Hundreds of Apps with Potential to Enhance Professional Development, Technical Assistance, and Dissemination Activities and Results* can be download from the Free Apps page of my blog at:
<http://exploringtech.wordpress.com/>



Do You Need a New Computer?

Tablets, pads, and smart phones are great...for what they do. But if you want to be able to create, manipulate, share, and use new digital media, you will probably need a laptop or desktop computer with some power behind it. Here is a basic checklist of things to consider for a computer that will enable you to work with large digital image, audio, and video files:



- ☐ **Platform:** Both PCs and Macs have their strengths and limitations and their advocates and detractors. Use what works for you. Whichever you use, choose the most recent **DEPENDABLE** version of operating system and configure the computer with enough power for the applications that you intend to use, and then some extra.
- ☐ Maximize the available processing speed
- ☐ Maximize the internal storage capacity (hard drive) AND realize that you will need external storage devices sooner or later
- ☐ Maximize the available memory
- ☐ Equip with a CD-ROM/DVD drive for playing and burning
- ☐ Have high quality video and audio cards factory-installed
- ☐ Of course, enabled for wireless connection to internet
- ☐ Be sure it has the most recent version of connectivity (e.g. newest versions of USB, Firewire ports, such as USB 3.0 and Firewire 800).

Basic Applications:

Eventually, you will use specialized applications to create new media. To begin with, be sure to load your computer with basic applications (free or purchased) such as:

- ☐ Word processing
- ☐ Presentation
- ☐ Desktop publishing, page layout
- ☐ Image editing
- ☐ Spreadsheets
- ☐ PDF creation and management
- ☐ DVD player
- ☐ Media players
- ☐ Audio editing
- ☐ Video editing
- ☐ Digital media transcoding

Resources to Help You Understand e-Learning

For those of us who are not well versed in newer technologies, it might be useful to review one or more of the glossaries of elearning terminology that are available. Three such glossaries are:

- Webopedia: Online dictionary and search engine for computer and Internet technology definitions: <http://www.webopedia.com/>
- American Society for Training and Development (ASTD) Learning circuits and Glossary: <http://www.learningcircuits.org/glossary.html>
- The Future of Education by Thomas Frey: <http://www.davinciinstitute.com/page.php?ID=170>
- Search on YouTube for key words such as web 2.0, elearning, and technology
- Lee Lefever's Common Craft SERIES on YouTube, e.g. Twitter in plain English



Resources to Help You Understand Performance Support

Performance support systems (PSS) are designed to help users do things during, rather than as a precursor, to the performance of a task. For instance, a very simple PSS might involve a job aide such as a sign in a restaurant reminding employees to wash their hands. Generally, electronic performance support systems (EPSS) do so using computers and related technology to give workers information or resources to help them accomplish a task or achieve performance requirements. EPSS represent a shift from acquiring knowledge to performing tasks.

“While there remains an important role for traditional education and training, the shift to user-centered, performance-based models is both inevitable and imminent (Hannafin, 1993, 1995). The delivery model has shifted from courses that teach decontextualized knowledge and skill to modules that support performance involving relevant knowledge and skill. This shift has affected all forms of education and training (IETI, 1995). EPSS design practices represent a convergence among several related fields and specialties, including human performance technology, computer-supported collaborative work, technical communications, electronic publishing, instructional design, and workplace training (McGraw, 1994; Sherry & Wilson, 1996; Witt & Wager, 1994).” (Hannafin, Hill, and McCarthy, see below)

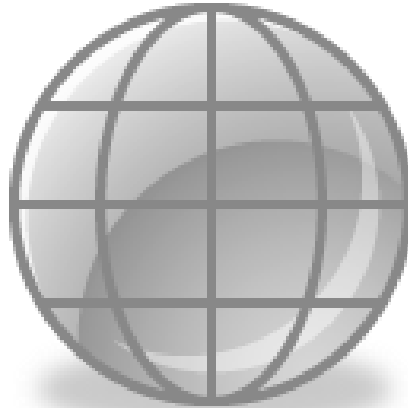
Resource: Read *Designing Resource-Based Learning and Performance Support Systems* by Michael J. Hannafin, Janette R. Hill, and James E. McCarthy, Sonalysts, Inc. at: <http://reusability.org/read/chapters/hannafin.doc>

Integrated Learning:

We're in the midst of an e-learning revolution, which includes rapid change, a myriad of emerging technologies, and great opportunities to redeploy training investments. Following are a few related concepts, on which we should keep a sharp eye.

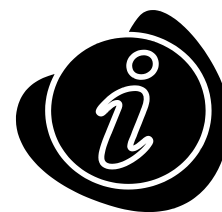
- **Learning Object:** A reusable, media-independent collection of information used as a modular building block for e-learning content.
- **LCMS (learning content management system):** A software application (or set of applications) that manages the creation, storage, use, and reuse of learning content. LCMSs often store content in granular forms such as Learning Objects.
- **Learning Management System** A software system that provides the platform for the enterprise's online learning environment by enabling the management, delivery and tracking of blended learning (i.e., online and traditional classroom) for employees, stakeholders and customers.

- **ILS (integrated learning system):** A complete software, hardware, and network system used for instruction. In addition to providing curriculum and lessons organized by level, an ILS usually includes a number of tools such as assessments, record keeping, report writing, and user information files that help to identify learning needs, monitor progress, and maintain student records.



Resources to Help You Keep Up with Technology

Technology for education and professional development is evolving so rapidly that it's very difficult to keep up. Below is a list of some web sites, blogs, content hubs, e-newsletters, and magazines that I try to keep up with. All of these resources have value in keeping up with what's out there and available. Please keep in mind that some of these resources might be tied to commercial products (some of which I endorse and some of which I don't).



Here are a few sites that just focus on technology in general:

Gizmodo: <http://gizmodo.com/>

Slashdot: <http://slashdot.org/>

TechCrunch: <http://www.techcrunch.com/>

Technorati: <http://technorati.com/>

Boing Boing: <http://boingboing.net/>

Wired Blog: <http://blog.wired.com/>

CES: <http://www.cesweb.org/default.asp>

Macworld: <http://www.macworld.com/>

Engadget: <http://www.engadget.com/>

Lifehacker: <http://lifehacker.com/>

Techmeme (tech news clearinghouse): <http://www.techmeme.com/>

Top 100 Tools for Learning 2010: <http://c4lpt.co.uk/recommended/top100-2010.html>

Learning TRENDS by Elliott Masie: <http://www.masie.com/>

The eLearning Guild: <http://www.elearningguild.com/>

Learning Circuits: <http://learningcircuits.blogspot.com>

elearning technology: <http://elearningtech.blogspot.com/>

eLearn Magazine: <http://www.elearnmag.org/index.cfm>

Pew Internet Project: <http://www.pewinternet.org/>

Community and Networks Connection: <http://cc.fullcirc.com/>

Informal Learning Flow: <http://flow.informl.com/>

Mlearnopedia: <http://cc.mlearnopedia.com/>

The Rapid E-Learning Blog: <http://www.articulate.com/rapid-elearning/>

ReadWriteWeb: <http://www.readwriteweb.com/>

Robin Good's MasterNewMedia: <http://www.masternewmedia.org/index.html>

Social Times – Technologically Social: <http://www.socialtimes.com/>

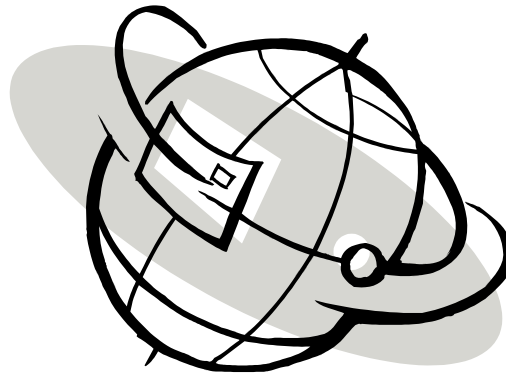
e-LearningGuru.com: <http://www.e-learningguru.com>

rSmart: Supports open source software in education: http://www.rsmart.com/blogs
Training Magazine Free E-Newsletters: http://www.trainingmag.com/content/subscribe-free-e-newsletters <ul style="list-style-type: none"> • Inside Training, Training Top 125, Training, Training Tech Talk
Apple Learning Interchange: http://edcommunity.apple.com/ali/
Consortium for School Networking (CoSN): http://www.cosn.org/#
International Society for Technology in Education: http://www.iste.org/
Center for Implementing Technology in Education (CITED): http://www.cited.org/ CITED's web site offers unbiased, reliable and timely resources and information for implementing technology in the classroom, school, and district.
State Educational Technology Directors Association: http://www.setda.org/web/guest/home
Center for Advanced Technology in Education: http://catweb.uoregon.edu/
Digital Journey: (Howie DiBlasi): http://www.drhowie.com/
Technology Horizons in K-12 Education (T.H.E.) Newsletters: https://newsletters.1105pubs.com/nl/THE.do?NL=6231&PC=C20NLF <ul style="list-style-type: none"> • News Update, T.H.E. SmartClassroom, T.H.E. Focus, Collaboration 2.0, Classroom Tools & Tips
Digital Directions: http://www.edweek.org/dd/
Empowering Teachers: A Professional and Collaborative Approach http://www.setda.org/web/guest/2020/professional-development
Campus Technology: http://www.campustechnology.com/mcv/newsletters/newsletters/ <ul style="list-style-type: none"> • Web 2.0, Campus Technology, IT Trends, Smart Classroom
Learn about animation: http://quest.portaportal.com/animato
Thinkofit: An independent guide to internet video conferencing products and services http://thinkofit.com/webconf/video.htm#webcam
TestFreaks: http://www.testfreaks.com/

Resources to Help You Keep Up with Digital Video



Creative Cow: http://newsletters.creativecow.net/
Studio Daily: http://www.studiodaily.com/studiomonthly/
HD Studio: http://www.studiodaily.com/hdstudio/signup.html
Videatives Views: https://www.videatives.com/content-new/videatives/videatives_views/index.php
Video Technology Magazine: http://www.videotechnology.com/
Video Technology Center: http://www.adobe.com/devnet/video/



Resources about Accessibility and Section 508 of the Rehabilitation Act of 1973

Section 508 requires that when Federal agencies develop, procure, maintain, or use electronic and information technology, Federal employees with disabilities have access to and use of information and data that is comparable to the access and use by Federal employees who are not individuals with disabilities, unless an undue burden would be imposed on the agency. Section 508 also requires that individuals with disabilities, who are members of the public seeking information or services from a Federal agency, have access to and use of information and data that is comparable to that provided to the public who are not individuals with disabilities, unless an undue burden would be imposed on the agency.

☐ **Full text of Section 508 of the Rehabilitation Act of 1973:**

<http://www.section508.gov/index.cfm?&FuseAction=Content&ID=12>

☐ **The W3C (The World Wide Web Consortium) outline of web accessibility:**

<http://www.w3.org/TR/WCAG20/>

☐ **WebAIM**

In the "Articles" page there are many step by step guides on making different kinds of documents and rich media accessible, like PDF, PowerPoint, Word, flash and other media.

<http://www.webaim.org/>

You can view videos showing the difficulties that people with disabilities have on the web at:

<http://www.webaim.org/intro/index.php#video>

Read specifically about Flash accessibility:

<http://www.webaim.org/techniques/flash/>

www.adobe.com/resources/accessibility/.../best_practices_acc_flash.pdf

☐ **University of Illinois' Functional Accessibility Evaluator:** <http://fae.cita.uiuc.edu/>

☐ **Accessify:** <http://www.accessify.com/>

☐ **Jim Thatcher.com Accessibility Consulting**

Jim is sometimes referred to as the father of web accessibility. His accessibility career started in 1983 with a research project for IBM called PCSAID, an audio access system for people who are blind. When you have questions, try spending some time on his website:

<http://www.jimthatcher.com/index.htm>

☐ **Mardiros Internet Marketing**

Carmen Mardiros breaks down what makes a web site good for everyone:

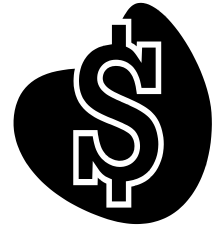
<http://www.mardiros.net/accessible-web-design.html>

☐ **Cognitive Disabilities and the Web: Where Accessibility and Usability Meet?** On the web site of the National Center on Disability and Access to Education (NCDAE), Heather Mariger offers suggestions based on basic usability principles, many of which make the web easier for everyone to use: <http://www.ncdae.org/tools/cognitive/>

☐ **Discover How to Provide Accessible Online Presentations**

A friendly, web tutorial by the United States Department of Agriculture's Target Center on ways to adapt web technologies to make presentations more accessible to people with disabilities at <https://admin.na3.acrobat.com/a774694537/p25975456/>

The Costs of Developing Elearning



Return on investment (ROI) refers to the ratio of the benefit received from a given investment to the cost of the investment. In training, ROI is often calculated by comparing the tangible results of training (for example, increased quality, productivity, compliance, or decrease in errors) to the cost of providing the training. In order to estimate ROI, we must be able to estimate the cost of providing training and measure the results of training. Following are some interesting approaches on calculating the ROI of e-learning.

The Cost of E-Learning:

<http://elearnmag.org/subpage.cfm?section=articles&article=86-1>

Online Training ROI calculator: Calculate the net cost and ROI of online training vs. traditional methods: http://training.cuna.org/trainers/roi_calc.html

Many Happy Returns: Calculating E-Learning ROI by John Setaro

<http://www.learningcircuits.org/2001/jun2001/elearn.html>

Measuring the Total Cost of e-Learning by Kevin Kruse:

www.brainseed.tv/whitepapers/E2.pdf

How E-Learning Can Increase ROI for Training By THINQ's Research Department:

http://www.ilmagazine.com/e_learn/resources/pdfs/ROI_training.pdf

Perspectives on cost & effectiveness in online training by Clive Shepherd:

<http://www.fastrak-consulting.co.uk/tactix/features/perspectives/perspectives.htm>

E-Learning Benefits and ROI Comparison of E-Learning vs. Traditional Training:

<http://knol.google.com/k/mary-kay-lofurno/e-learning-benefits-and-roi-comparison/nti9bs9a4lxe/16#>

Online Professional Development Weighed as Cost-Saving Tactic:

<http://www.edweek.org/dd/articles/2009/03/13/04ddprofdev.h02.html#players>

Here's How to Measure ROI in the Real World

<http://www.articulate.com/rapid-elearning/heres-how-to-measure-roi-in-the-real-world/>

An Alternative Way to Assess the ROI of e-Learning in Training: Part I

<http://elearnmag.org/subpage.cfm?section=articles&article=107-1>

An Alternative Way to Assess the ROI of e-Learning in Training: Part II

<http://elearnmag.org/subpage.cfm?section=articles&article=108-1>

ROI is toast. Use EVA instead:

<http://www.internetime.com/blog/archives/000385.html>

How **MIGHT** Technology Assist You?

Functions	How do you do it now?	What technologies might you use to do this more effectively and/or efficiently?
Conduct needs assessment/front end analysis		
Present professional development events		
Provide TA, consultation, coaching, mentoring		
Disseminate news, updates, documents		
Host/facilitate meetings or conferences		
Facilitate collaborative processes		
Build and strengthen relationships		
Evaluate activities and programs		
Facilitate social learning		
Exchange information with others		
Enhance service delivery		
Conduct research		
Manage projects		
Manage data (collect, analyze, report, use)		
Other		
Other		

Examples of Different Technologies for Different Communication Functions

One-Way Asynchronous Communication	Two-Way Synchronous Communication	Asynchronous Synergistic Communication
Text document	Text-based chat	Online survey
Podcast	Telephone conferencing	Content Management System
Webcast	Video conferencing	Community of Practice
Video, vidcast	Webinar, web conference	Virtual Learning Environment
Media sharing sites	Online meetings spaces	Bulletin board, news group
Mobile-phone	Mobile-phone	Mobile-phone
Archived class, lecture		Chats, threads, list serves
Rapid e-learning modules		Blog, micro-blog, vlog
Just-in-time EPSS		Wiki
Resource repositories		Social bookmarking
Knowledge bases		Social network
		Shared applications
		User's groups/forums