The eLearning Guild's LEARNING SOLUTIONS

Practical Applications of Technology for Learning

-e-Magazine

THIS WEEK: Management Strategies

Technology Trends: e-Learning 2.0

By Anita Rosen

bout every ten years, there is a "new and emerging" trend in the technology industry. The 1970's brought us the acceptance of mainframes; the 1980's brought the client server market; the 1990's gave us the Internet; the 2000's are bringing us "Web 2.0." Each new trend does not mean the demise of the previous trend. We still have mainframes, PCs, servers, software, and Internet browsers.

However, new trends layer on top of older established technologies, and enable us to provide new services to a growing user base. In the 1980's the technologies made it easier to mass market. The 1990's Internet explosion allowed us to mass customize. Today's trends let us mass personalize. Specifically, mass personalization allows users with specific (niche) needs to access products, services, or like-minded people.

Tim O'Reilly and Dale Dougherty of MediaLive have dubbed the latest trends in technology "Web 2.0." In this article, I will explore the trends and technologies they include in Web 2.0, and discuss how these trends and technologies apply to the e-Learning marketplace.

The big trends

In the first 2000's decade, we have a large, diverse base of online users and we have new iterations of technologies that support different applications. Here are the biggest trends dubbed "2.0."

Once the technology pundits began talking about Web 2.0, it was only a matter of time before e-Learning picked up the same numerical version prefix. But what's all the excitement about? In a word, plenty. In this week's article, you will learn about the trends and technologies that are changing the way you will create e-Learning!

A publication of



Application services

Web 2.0 focuses on services rather than software. Unlike the types of technologies that were introduced in the 1990's, application services don't require the end users to load software onto their computers. Services reside on the Web. When the end users want to participate or use a service, they go to a Web site. Most Web services were not available five to 10 years ago. Remember when you needed to look up driving directions from a map? Remember when you wanted to buy a new house, you had to get listings from your real estate agent who found all the homes in your area, and then you had to drive past each home? Applications such as online driving directions and MLS listings are examples of application services.

Focus on "the long tail"

This refers to the portions of the population/market bell curve that reflect smaller markets. The tail can be very long – there are many potential users who are not being serviced by the organizations that service the core consumers. Mass marketing organizations focus on the center of the bell – that's where the majority of the people are. With so many people on

the Internet it has become much easier to market to people in the tails of the curve. Specifically, there can be many geographically dispersed people with a like interest who are not interested in what the majority wants. These people's interests fall into niches for which it was not economical to have service providers except in the largest population centers.

Netflix is an example of a company that has become successful by marketing to the tail of the curve. Users can request old, "indie," or foreign films not easily obtainable from local retail stores. Because of limited shelf space, the local video rental stores have to cater to the general popular culture market, so they cannot stock all the obscure, non-mainstream films.

Mashups

Mashups involve taking multiple technologies or services and providing new added value services. A site like Zillow.com lets you view an online map and see the price of houses in a specific neighborhood. Zillow.com accesses two different databases of information – maps and county assessment records, combining them into a new added value service.

E-Learning's long tail consists of all those industry or company-specific classes that are appropriate for a relatively small audience. Rapid e-Learning is the trainer's solution for accessing long-tail users.



Publisher David Holcombe

Editorial Director Heidi Fisk Editor Bill Brandon

Copy Editor Charles Holcombe

Design Director Nancy Marland Wolinski

The eLearning Guild™ Advisory Board

Ruth Clark, Lance Dublin, Conrad Gottfredson, Bill Horton, Bob Mosher, Eric Parks, Brenda Pfaus, Marc Rosenberg, Allison Rossett

Copyright 2002 to 2006.

Learning Solutions e-Magazine™ (formerly **The eLearning Developers' Journal™**). Compilation copyright by The eLearning Guild. All rights reserved. Please contact **The eLearning Guild** for reprint permission.

Learning Solutions e-Magazine[™] is published weekly for members of *The eLearning Guild*, 525 College Avenue, Suite 215, Santa Rosa, CA 95404. Phone: +1.707.566.8990. www.eLearningGuild.com

Learning Solutions e-Magazine™ is designed to serve as a catalyst for innovation and as a vehicle for the dissemination of new and practical strategies, techniques, and best practices for e-Learning design, development and management professionals. It is not intended to be THE definitive authority ... rather, it is intended to be a medium through which e-Learning professionals can share their knowledge, expertise, and experience. As in any profession, there are many different ways to accomplish a specific objective. Learning Solutions will share many different perspectives and does not position any one as "the right way," but rather we position each article as "one of the right ways" for accomplishing an objective. We assume that readers will evaluate the merits of each article and use the ideas they contain in a manner appropriate for their specific situation.

The articles in **Learning Solutions** are all written by people who are actively engaged in this profession – not by journalists or freelance writers. Submissions are always welcome, as are suggestions for future topics. To learn more about how to submit articles and/or ideas, please visit our Web site at www.eLearningGuild.com.

Enlisting end users to add value

End-user comments, blogs, and critiques may add value to generic information. Amazon was one of the first to stumble onto this. By allowing everyone to provide book reviews, they added value to their service as a bookseller, made it difficult for competitors to replicate, and increased the value of their service. Wikis are a new form of this phenomenon. By providing the infrastructure and focus, a Wiki harnesses end users to add value to a Web site.

"Intel Inside" (branding of core capabilities)

"Intel Inside" refers to branding of core capabilities that the end user does not directly purchase. With the Web, the Intel Inside strategy means providing the underlying value that is being used by others. In the Web services space, Google has been licensing their search engine so that it can be locally hosted for intranet (local internal Web site) searches. This further extends the branding for their services.

Providing services above the level of a single device

This is about the ability to provide Web services that run smoothly on any configuration of PC or portable device. Installed software is usually designed for a single operating system (e.g. MS Windows, Macintosh, or Linux). By providing software services through a Web browser interface, operating system dependence is eliminated. This means the same service is accessible from a PC, a Mac, or a PDA.

Web 2.0 applications

In addition to trends, new technologies enable Web 2.0 applications. These technologies are used and combined to create new services.

RSS

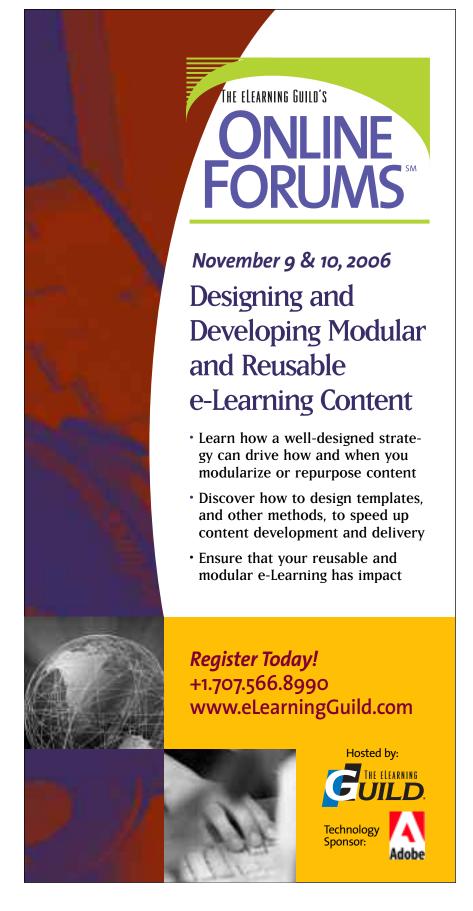
RSS turns Weblogs from a re-active technology into a pro-active technology. RSS is an automatic notifier for Weblogs. It provides an end user with a notification that a new posting has been added to a blog they are interested in. This turns blogs and newsgroups from posting repositories into a form of interactive communication.

Podcasts

Podcasts are a delivery mechanism to store audio/video on a portable player. Organizations can produce and provide audio and video (infotainment) broadcasts that can be downloaded and played on their portable player ("iPod").

Scripting

The latest generation of scripting and programming languages such as AJAX, Perl, Python, and Java now



has more built-in routines that allow computer-to-computer communication. This speeds up development of more distributed applications that collect information or farm out computing to other servers.

XML

Although the common understanding of XML is quite different, XML is really infrastructure that allows pre-programmed definitions to be passed between Web pages. This is probably the most over-marketed and misunderstood technology on the Web. It seems like any vendor that is having a problem providing an advanced application will say they support this functionality via XML.

In reality, XML is to the Web what Roman characters are to writing English. The invention of Roman characters provided an easy infrastructure to communicate via writing. Roman characters alone do not provide communication. What you need on top of Roman characters is an agreement on language e.g. Spanish, French, English, or Italian. Likewise for XML, the ability to pass XML strings does not provide you with any services unless a specified data format has been agreed on. One of the most successful XML data formats is Rosettastone, a data format used by manufacturers.

A note to anyone purchasing a system where the vendor touts XML: Ask the next question — what data format are you using? If the vendor says they are using their own data format you will know they used the term XML to make a proprietary solution sound open. The "X" in "XML" stands for "eXtensible." This means that one of the main features of the language is that it can be extended. But unless all parties using the particular document understand the details of vendor-provided extensions to the language, the communication will fail.

2.0 trends applied to e-Learning

Now that we know what the 2.0 trends and technologies are, we need to understand how these trends and technologies are applied to e-Learning. It is important to remember that the end user is the learner; and that the supplier is the course creator, trainer, or training organization. Companies that provide LMSs, authoring tools, and simulation tools are providing the "enabling technologies" used by trainers to provide 2.0 services to end users. LMSs, authoring tools, and simulation tools are to trainers what a database is to Google: the behind-the-scenes engine to provide their service.

My mother would say that not all fashions are for everyone. The same statement works when applied to technology. Because a technology is in fashion does not mean it has to be deployed. The goal is to provide effective, accessible learning – not to show off that you can use a new technology.

Courses are the application service.

An end user takes a course over the Web. The user does not need to download any software or learn any new application. Like all effective application services, an effective course adheres to the principles and practices of good Web publishing. Pages should display quickly without the need of a plug-in, appropriate navigation should be used, and integration to other services (like an LMS) should be transparent.

E-Learning's long tail

E-Learning's long tail consists of all those industry or company-specific classes that are appropriate for a relatively small audience. Rapid e-Learning is the trainer's solution for accessing long-tail users. Most training needs fall in the long tail, while most off-the-shelf courses are produced for the sizable (bell) market.

E-Learning mashups

E-Learning does mashups by taking multiple sources to provide additional services for a learning experience. Don't make the mistake of thinking that by combining different online pages from different courses you can produce a mashup course. More likely, you will only produce a ransom-note course.

Look at the broader goal of training: e-Learning has been providing mashups for years. We call it "blended e-Learning." A good trainer will look at the different technologies and delivery systems available and mash up a solution that is effective for their learner base. This may include text, pictures, multimedia, and quotes from different authors, hands-on training, live presentations, and self-paced delivery.

Harnessing end users (learners) to add value

Forums, blogs, wikis, etc. can all be created to surround your course with an expanded set of learner resources. You need to be very careful to be sure that you understand your learner's culture. (Most mid-level and senior level employees are too busy to contribute to blogs and Wikis.) You will never get these expanded resources off the ground if you don't have a culture that fosters and gives value to adding and joining Wikis, blogs, and forums. Also, don't make the mistake of thinking that Wikis, blogs, and forums are e-Learning. They are resources. E-Learning needs structure and instructional design to be effective and provide return on investment.

Microcontent moves learners from training to learning

Required training will never go away. Microcontent

Web 2.0 focuses on services rather than software. Unlike the types of technologies that were introduced in the 1990's, application services don't require the end user to load software onto their computer. Services reside on the Web. When the end user wants to participate or use a service, they go to a Web site.

is small training sessions that are taken as the need arises. For instance when an employee needs to access a corporate service, she types the name of the service into the corporate search engine. A link to the service, along with a short course on how to use the service comes up at the top of the search. The employee takes the short training, and then uses the service correctly.

Services above the PC

When you create a course, you don't know how a learner will be accessing it. Create your courses using technologies (HTML, CSS) that are supported by all of the devices including PCs of any configuration, PDA's, and mobile phones. Avoid authoring tools that force you to choose the size of the output screen before you produce your course, or that provide absolutely positioned pages. To be effective you need to use the Web (and specifically a browser) the way it is designed to be used.

"Intel Inside"

In the case of a course, the content is the core value. If you establish a reputation for providing good content that is easily accessible, and that does not require recurring delivery maintenance costs, you will improve your ability to brand yourself through your material. With e-Learning your courses should be more than a one-time event. Courses should be searchable and accessible on the network. Employees should be able to type in key words and have access to course pages that apply to what they are trying to do at that moment.

New technologies

Just because it is new does not mean the old is bad and the new is good. Your goal is to get the end user to learn. A new technology is only effective if it provides you with a better service. Podcasts are on everyone's lips right now. The benefit of Podcasts is the delivery mechanism and the popularity among the consumer electronic market. It is much easier to put an audio on a Web site and let iPod users download it then it was to send people tapes and have them play the tape in their car or Walkman.

However, the new technologies have not added any value to the content. A boring speaker will be just as boring on an iPod as they were on a Walkman. They will be more boring through a recording than when they gave the live presentation.

To work well for organizations, Podcasts should be professionally produced by audio specialists, should be narrated by professional actors/narrators, and should be entertaining. That's why the most popular Podcasts are radio shows and music.

Case Study — Knowledge Pills

Knowledge Pills Inc. is a Web 2.0 e-Learning company. Knowledge Pills Inc. develops short, 15-minutelong, training courses for the consumer and corporate market place. In the corporate market place, Knowledge Pills' goal is to provide companies with employee-directed courses that can be taken just-in-time throughout the business cycle. Daniel Purlich, CEO of Knowledge Pills, sees his company as a knowledge provider. "Like most people who access an application service, visitors to our site, or clients that put our products on their intranet, do not want their end users to feel like they are accessing technology," states

Employees should be able to search a string of words in their corporate search engine and a Knowledge Pill containing this information should come up. Employees can take a course on whatever device they use without restrictions, or needing additional technology that will slow them down.

One of the first courses Knowledge Pills built was "Doing Business in China." There are 450-page books and week-long seminars on doing business in China. These are necessary for the manager who is moving to China to run an operation. The manager who is flying to China for a two-day business trip does not have the desire or need for this level of breadth and depth of information. What they want is a fifteenminute course that highlights basic courtesies and business etiquette. This type of quick-to-take course that is focused on long-tail subjects, and of interest to a small specific market, is what Knowledge Pills provides. Knowledge Pills intends to provide short courses on hundreds of subjects that help workers stay in tune and up to date with current issues, trends, and technologies that affect them on a daily basis.

Knowledge Pills has also shaken up the traditional sales model. Purlich has been on the receiving end of course pitches for over 20 years. "I was always frustrated that the course was missing in the sales pitch," says Purlich. "Few purchasers of training courses ever take an entire course they purchase; many times they buy courses without ever seeing them. We embrace the modern concept that information should be accessible. With Knowledge Pills, all the training courses are on the Web site. You don't need special passwords to access the training and you can take an entire training course, not just a couple of pages that show how pretty the training looks." Purlich also believes in enlisting the end user to add value to the training process. Wikis, newsgroups, student comments, and rankings should be part of any training course.

Knowledge Pills are initially available in four lan-

It is important to remember that the end
user is the learner; and
that the supplieer is the
course creator, trainer,
or training organization.
Companies that provide
LMSs, authoring tools,
and simulation tools
are the "enabling technologies" used by trainers to provide 2.0 services to end users.

guages: English, French, Spanish, and German. Courses will eventually be in many more languages. Their philosophy is that learners should be able to take courses in the language they are most comfortable learning in. Knowledge Pill plans to have distribution in North America and Europe. The general learner can access the Knowledge Pill Web site for free.

Most companies want to control their employees' learning experience by having courses available through their intranet and by using their LMS. Knowledge Pills has a program where companies can purchase courses and receive additional services including customization of content, customization of the course look and feel, and custom Knowledge Pills.

Many of Knowledge Pills' ideas about type, length, and accessibility of e-Learning come from founder Daniel Purlich's experience in the training market-place. Purlich has a traditional training and e-Learning background. In the 1990's Daniel was the general manager of France Telecom's training division where he was initially responsible for identifying corporate training direction, and purchasing and developing CBT training and, eventually, e-Learning courses. More recently, Purlich was director of content development at Educaterra, the training arm of Telefonica, the second largest telecommunications company. In 2004, Daniel's organization at Educaterra provided 90,000 Telefonica employees with over a million hours of training a year.

Purlich worked closely with managers throughout the organization to understand their needs and requirements. What quickly became apparent was that there was a fundamental change in training that managers were requesting. Managers did not want to take their employees out of the workplace for training. Changes in technology and business operations were happening frequently. Managers needed to be assured that employees were up on these changes. They could not afford to have employees out of the office for days of time. What managers wanted were brief, fifteen-minute training sessions that employees could take anywhere, when the need arose, which provided the employee with the nugget of information that was needed for them to perform their job or be able to participate effectively in a meeting or conference call.

Purlich realized that for his organization to react to this change they needed to change the size and scope of course production. Courses needed to be reorganized and prioritized differently. Many cheap-to-produce, short training courses on subjects that were pertinent today but may not be pertinent in the future needed to be produced. These courses had to work on monitors of any resolution, including PDA's and cell phones. Managers throughout the organization are happy with the direction training is heading. They

realize that classroom training and traditional e-Learning will not go away. Quick, cheap, rapid e-Learning courses provide them with the necessary training infrastructure employees need to do their job now. These courses are very popular with employees. They allow them to keep up with trends and their workload.

E-Learning 2.0 courses: Conclusion

So what does a 2.0 course look like? 2.0 courses should never be a hodge-podge assembly of old methodologies delivered through new technologies. They should be a true "2.0 course," rather than a self-propelled PowerPoint presentation or CBT training presented on a PDA. 2.0 courses provide just-in-time training. They are used as a resource — not a one-time event. A 2.0 course lasts 15 to 20 minutes, runs smoothly on any configuration of device (high resolution, portable) or PDA, and delivers smoothly on all versions of Web browsers. Finally, 2.0 courses incorporate the best-of-breed techniques from Web design and instructional design.

Author Contact



Anita Rosen is a trainer, speaker, and author on topics including e-Learning and e-Business. She has appeared as a guest speaker on many business radio programs including regular appearances on

Jim Blasingame, Small Business Advocate, the Jerry Bower Show, America Radio's It's Your Money, the Edward Lowe Report, and International Business on KUCI; She has been an editor or contributor to the I.T.Times and The eLearning Guild. Anita has been a speaker at a number of conferences hosted by organizations including The eLearning Guild, the country of Singapore, French Telecom, and the American Management Association.

Ms. Rosen has written three books: Effective IT Project Management, The E-Commerce Question and Answer Book, and Looking Into Intranets and the Internet, all published by AMAcom. Contact Anita by email to anita@readygo.com

Discuss this article in the "Talk Back to the Authors" Forum of Community Connections (http://www.elearningguild.com/ community_connections/forum/categories. cfm?catid=17& entercat=y). You can address your comments to the author(s) of each week's article, or you can make a general comment to other readers.

Additional information on the topics covered in this article is also listed in the Guild Resource Directory.

2.0 courses should never be a hodgepodge assembly of old methodologies delivered through new technologies. They should be a true "2.0 course," rather than a self-propelled PowerPoint presentation or CBT training presented on a PDA. 2.0 courses provide just-in-time training. They are used as a resource - not a one-time event.

About the Guild



A Worldwide Community of Practice for e-Learning Professionals

The eLearning Guild is a Community of Practice for e-Learning design, development, and management professionals. Through this member driven community we provide high-quality learning opportunities, networking services, resources, and publications.

Members represent a diverse group of managers, directors, and executives focused on training and learning services, as well as e-Learning instructional designers, content developers, Web developers, project managers, contractors, and consultants. Guild members work in a variety of settings including corporate, government, and academic organizations.

Guild membership is an investment in your professional development and in your organization's future success with its e-Learning efforts. Your membership provides you with learning opportunities and resources so that you can increase your knowledge and skills. That's what the Guild is all about ... putting the resources and information you need at your fingertips so you can produce more successful e-Learning.

The eLearning Guild offers four levels of membership. Each level provides members with benefits commensurate

with your investment. In the table you will find a comprehensive summary of benefits offered for each membership level. To learn more about Group Membership and pricing, go to www.eLearningGuild.com.

Guild Benefits	Associate	Member	Member+	Premium
eLearning Insider	✓	√	√	✓
Annual Salary Survey	✓	√	√	√
Past Conference Handouts	✓	✓	✓	✓
Resource Directory - Access & Post	✓	✓	✓	✓
Info Exchange - Access & Post	✓	✓	✓	✓
Job Board - Access Jobs & Resumes	✓	✓	✓	✓
Job Board - Post Resumes	✓	✓	✓	✓
Job Board - Post Jobs	X	✓	✓	✓
Guild Research - Online Briefings	✓	✓	✓	✓
Guild Research – Reports	X *	✓	✓	✓
Guild Research – Archives	X	✓	✓	✓
Learning Solutions e-Magazine	X *	✓	✓	✓
Online Forums - Archive	X	X	✓	✓
Online Forums	\$	<i>\$</i>	✓	✓
Face-to-Face Conferences	\$	\$	\$	√ *
Pre-Conference Workshops	\$	\$	\$	√ *
Event Fee Discounts	X	20%	20%	20%
Other Event Site License Discounts	X	X	20%	20%

*See www.eLearningGuild.com for details

√ = Included in Membership

X = Not available

\$ = Separate fee required

The eLearning Guild organizes a variety of important industry events...



for topics and dates!

DEVLEACN.
THE ELEARNING DEVELOPERS' 2006

October 10 - 13, 2006 SAN FRANCISCO



October 10 - 13, 2006 SAN FRANCISCO



