What’s Now and What’s Next in e-Learning: Technologies and Practices

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President
Tech Empower
First Law of Technology

- A consistent pattern in our response to new technologies is we simultaneously overestimate the short-term impact and underestimate the long-term impact.
  - Roy Amara of the Institute for the Future.

- 1995 - Internet Adoption passes 10%
- 1996 - Authorware, Toolbook, Director, IconAuthor
- 1996 – Off-the-shelf CD-ROM training is booming
- 1996 – One “IBT” session at ASTD conference
- 1996 - Course tracking → learning management
- 1997 – Saba Founded, Flash 1.0 Released
- 2000 – SCORM 1.0 Released

Learning Design in 1996

Performance Analysis
- Business goals
- Performance needs
- Org / Job / Task Information

Environment
- Past audience experience
- Audience geography, availability
- Turnover
- Culture
- Task complexity, frequency
- Cost of errors
- Budget

Tools & Delivery Models
- Instructor-led training
- CD-ROM training

Learning Design in a Nutshell

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Bottom Line Challenge
What do you use and in what case?
What is your process to account for this?
What do you do now to be ready in future for using these solutions?

<table>
<thead>
<tr>
<th>Main Components</th>
<th>eLearning 1.0</th>
<th>eLearning 1.3</th>
<th>eLearning 2.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Courseware, authoring tool, LMS</td>
<td>Reference hybrids, LCMS, discussion groups</td>
<td>Wiki, Social Networking &amp; Bookmarking, Add-ins, Mash-ups, Peer learning</td>
<td></td>
</tr>
<tr>
<td>Top-down, one-way</td>
<td>Top-down, some collaborative</td>
<td>Bottom-up, learner-driven, peer learning</td>
<td></td>
</tr>
<tr>
<td>Long</td>
<td>Rapid</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>15 minutes</td>
<td>1 minute</td>
<td>Content Size</td>
<td></td>
</tr>
<tr>
<td>Prior to work</td>
<td>In between work</td>
<td>During work</td>
<td></td>
</tr>
<tr>
<td>At one time</td>
<td>In many pieces</td>
<td>When you need it</td>
<td></td>
</tr>
<tr>
<td>LMS</td>
<td>Email, Intranet</td>
<td>Search, RSS feed</td>
<td></td>
</tr>
<tr>
<td>ID</td>
<td>Learner</td>
<td>Worker</td>
<td></td>
</tr>
<tr>
<td>ID</td>
<td>SME</td>
<td>User</td>
<td></td>
</tr>
</tbody>
</table>

Reference Hybrids

- **WellPoint Example**
  - New software system
  - 10 minutes to get up and running, but also supports detail oriented people, supports infrequent users
  - Fast approaching conversion date, didn’t want to spend lot of money
  - Needed easy updates

- **Solution**
  - Email communications
  - Hybrid reference/courseware with embedded simulations
  - Follow-up minor updates

- **More Info**
  - eLearning Technology: Shift in eLearning from Pure Courseware towards Reference Hybrids
Web 2.0

- Social
  - Everyone as Publisher (read/write web)
  - Harnessing Collective Intelligence
  - Tagging & Folksonomy
  - Social Computing (e.g., Social Networking, Social Bookmarking)
- Technical
  - Web as a Platform
  - Software as Service
  - Richer User Experience
  - Lightweight Computing Models
  - Add-ins & Mash-ups

Introduction to Wikis

- http://www.PBWiki.com
- http://collaborativelearning.pbwiki.com

More eLearning 2.0 Tools

- Blogs – http://www.blogger.com
  - http://elearnmytech.blogspot.com
  - http://elearndev.blogspot.com
  - http://scottsroundup.blogspot.com
- RSS Reader – http://www.bloglines.com
- Social Bookmarking
  - http://del.icio.us
  - http://myweb.yahoo.com
- Social Network – http://www.linkedin.com
- Add-ins & Mash-ups (polls, ask-a-question, discussion, ratings, …)
More Trends

- Search
- Audio/Video Comeback
- Form Factor Explosion
  - Apple Sales Training
  - MP3 delivered to iPod
  - CD Audio
  - Large Restaurant Chain
  - POS devices (lots are Windows now)
  - 15 minute vignettes
  - Tablet PCs with wireless tomorrow
  - Large Pharm
  - Palm and Pocket PC application for AIDS type diagnosis
  - Trucking Company
  - Tests via Phone

Many times, Many places delivery

Your Tools & Delivery Models?

Live face-to-face (formal)
- Instructor-led classroom
- Workshops
- Coaching/mentoring
- On-the-job (OTJ) training

Live face-to-face (informal)
- Peer-to-peer
- Work teams
- Role modeling
- Apprenticeship

Virtual collaboration/synchronous
- Live e-learning classes
- E-learning
- Office hours

Virtual collaboration/asynchronous
- Email
- Online bulletin boards
- Listservs
- Online communities

Marketing & Communications
- Early adopters / experts
- Email / newsletters

Self-paced learning
- Web learning modules
- Online resource links
- Simulations
- Scenarios
- Video and audio CD/DVDs
- Online assessment
- Workbooks

Performance support
- Help systems
- Print job aids
- Knowledge databases
- Documentation
- Performance/decision support tools

1. Build YOUR list!
2. Experiment!

3. Get tools from different categories

- Custom Coding
- Flash
- DHTML

- Authoring Tools
- Lectora
- Captivate

- Rapid eLearning
- PPT + Audio + Interactions
- Form-based Authoring
- Interactive PowerPoint

- Simple HTML
- Dreamweaver
- CMS
- Podcasts
- Blogs
- Email

- RoboInfo
- Simple PPT
- Wiki

- Ease
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Delivery Pattern

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High-Level Indicators

- eLearning 1.0
  - Common, identifiable needs
  - Novice to subject
  - Required (compliance, cost-of-errors)
- eLearning 2.0
  - Different needs
  - Information cannot be cost effectively identified up front
    - Too much information
    - Information is not yet known

Considerations

- Audience
  - Size / Geography / Time Zones
  - Experience level?
  - Skill level?
  - Time prior to performance?
  - Motivation / change issues?
  - Past experiences
  - Turnover
- Timeline / Budget
- Content – Updates? SMEs?
- Performance – Complexity? Cost of Errors? Frequency?
- Compliance? Developmental?
- Culture
- …
Task Complexity and User Experience Level

<table>
<thead>
<tr>
<th>Experienced</th>
<th>Inexperienced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simple</td>
<td>Complex</td>
</tr>
<tr>
<td>Training</td>
<td></td>
</tr>
<tr>
<td>• Courseware</td>
<td>• Performance support</td>
</tr>
<tr>
<td>• ILT</td>
<td></td>
</tr>
<tr>
<td>• DILT</td>
<td></td>
</tr>
</tbody>
</table>

Business Case/Timing:
Cost of Errors and Frequency of Use

<table>
<thead>
<tr>
<th>Frequent</th>
<th>Infrequent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Errors Not Acceptable</td>
<td>Some Errors Acceptable</td>
</tr>
<tr>
<td>• Training</td>
<td>• Reference Manuals</td>
</tr>
<tr>
<td>• Simulations</td>
<td>• Cheat sheets</td>
</tr>
<tr>
<td>• Performance support</td>
<td>• Online help</td>
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</table>

Can you bring them together?

<table>
<thead>
<tr>
<th>Centralized</th>
<th>Asynchronous</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synchronous</td>
<td>Geographically Distributed</td>
</tr>
<tr>
<td>• Classroom training</td>
<td>• Self-paced</td>
</tr>
<tr>
<td>• People-delivered</td>
<td>• Performance support</td>
</tr>
<tr>
<td>• Virtual classroom</td>
<td></td>
</tr>
</tbody>
</table>
Biggest Challenge
Learn How to Learn

• "Being adaptable in a flat world, knowing how to 'learn how to learn,' will be one of the most important assets any worker can have, because job churn will come faster, because innovation will happen faster."

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Examples 90-Day Action Plan

• Immediately
  - Commit to improving your "learn how to learn" skills
  - Sessions at the conference: Considerations? Learning Design? Tools & Delivery Model?

• Weeks One and Two
  - Sign-up on Bloglines and subscribe to a few RSS feeds
  - Scan the feeds once a week (create one comment a week)
  - Sign-up on Blogger: Write in it once a week
  - What you learned at the conference, Challenges you are facing, Thoughts about particular learning approaches

• Weeks Three and Four
  - Sign-up on LinkedIn (Fill in your profile, Link to me)
  - Sign-up on Yahoo MyWeb or del.icio.us (Start bookmarking/tagging pages/posts)

• Every other month
  - Evaluate what you are doing to learn
  - Consider evaluating a new tool, add-in, technique
  - Connect with one other professional.