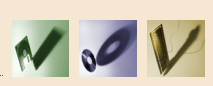


Introductions


- **St. Louis Community College**
- **Workforce and Community Development**
- **Center for Business, Industry & Labor**

- **Steve Long** - Director, WCD
- **Richard Schumacher** - Mgr, Technology Initiatives


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Online Instruction Advantages




- Self-paced learning
- Delivering content on demand / easy content distribution
- Content reuse and collection
- Application sharing and demonstrations
- Q&A via discussion groups (instructor/facilitator response is time sensitive)
- Provides both private (email to instructor) and public (discussion group) communications
- Ways to fairly easily monitor student progress and participation
- Economy of scale, larger class sizes





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Issues with Online Instruction




- Most developers and SMEs have not had the chance to experience an Internet-based course as a student – so they don't have exposure to what works and what doesn't
- This can create an “experimental” character to online activities
 - Difficult to gather success data
 - Difficult to interpret results
 - Difficult to interpret student perceptions





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Issues with Online Instruction




- Internet-enabled courses are very different from traditional counterparts
- Need to educate students, instructors, clients and administrators about this different nature
- Students may need assistance with the online learning process and what is expected, usually requiring some face (or phone) time to help them get started or complete assignments





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Issues with Online Instruction




- Online works best for asynchronous learning activities
 - Practice testing
 - Content on demand
 - Content collection/distribution of materials
 - Self-paced learning
 - Centralized questions and answers
- There is little benefit, except for the conveniences of location or application sharing, in synchronous online learning – for every other case, a traditional classroom is superior for synchronous learning
- Availability, and rapid response (returning emails, calls, etc), becomes vital in asynchronous activities





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Issues with Online Instruction

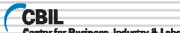


- **Disruption caused by changing technology**
- **Key online technologies (email, html, etc) have matured, and LMS systems have embraced them**
- **Common communication standards (XML) and online teaching packages (SCORM) are starting to mature – making for easier, platform independent deployments**
- **Still too many ways to create multimedia content (especially for animation and complex interactivity)**
- **All the vendors have a different approach to synchronous delivery**
- **Synchronous delivery has issues of cost, reliability, participation limits, network issues and high bandwidth requirements**





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eLearning Design (ISO Usability)




- **Effectiveness: learner's ability to achieve specific goals in the environment, attainment of instructional objectives**
- **Efficiency: learner experiences minimal frustration and obstacles using the environment, how quickly and cost-effectively learning objectives are obtained**
- **Satisfaction: learner is comfortable and accepting of the system overall, encourages their desire to learn**





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eLearning Design




- **Instructional design selects suitable resources and activities that will engage learners and encourage them to make the connections necessary for learning to occur**
- **An online environment needs to be easy to use – obvious and instinctive**
- **eLearning is just another learning tool – like reading a book or instructor-led training – it’s not a “total solution”**
- **The biggest corporate eLearning issue is boring, low-quality content**
- **People learn best when they can learn exactly what they need at exactly the moment they need it**





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eLearning Business Goals




- **Access any learning resource at any time from any place**
- **Reduce trainer, facilities and travel costs**
- **Standardized, consistent delivery (may be driven by unmonitored on-the-job training or legal issues)**
- **Scheduled training not meeting demand**
- **Economy of scale, reduced cost by increased efficiency**
- **More timely delivery (may be the result of a distributed workforce)**
- **Can be always up to date**
- **Not only for employees – also for customers, partners, suppliers, resellers**
- **More efficient “just enough” delivery – provide the exact content at the exact moment it is needed**




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eLearning Barriers




- **eLearning Barriers Facing Employees**
 - Personal or dispositional (least common)
 - Learning style
 - Instructional
 - Situational (most common)
 - Organizational
 - Content Suitability
 - Technological
- **Predictors of eLearning Barriers**
 - Organization
 - Self-efficacy
 - Computer competence
 - Computer training

Source: "The Seven E-Learning Barriers Facing Employees," University of Louisville, 2003





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eLearning Trends




- **Expect steady growth in the eLearning market**
- **More money is being spent on eLearning as a total percentage of overall budgets**
- **Focus shift to services and implementation (ROI, align learning objectives with business objectives) instead of technology and tools**
- **For business users, too much time is still being spent on the implementation phase**
- **eLearning products are starting to look alike**
- **Prices for LMSs and OTS content is dropping**
- **Emphasis on measurement and analytics – performance improvement and knowledge management is just as important as the learning component**





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eLearning Applications




- **Orientations**
- **Targeted, pre-developed learning**
- **Custom developed training**
- **Blended approach**
 - **Best-in-class teachers create content designed for classroom presentation guided by a live facilitator**
 - **Allows higher quality education in more topic areas at less cost**
 - **Interpersonal skills development always requires face-to-face interaction**
 - **Course/discussion approach (“distance learning”), OJT+eLearning, online pre-assessment**




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Need for Constant Updating



- **The sum total of human knowledge will double in 5 years**
- **By 2020, it is predicted to double every 73 days**

Source: “Integrating e-Learning into the Workplace,” Mohd Hishamuddin Harun, Medical Online Sdn Bhd



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Focus on Business Needs

The pie chart is divided into six segments, each representing a business need. The segments are: Time efficient (purple), Cost effective (blue), Impacts bottom line (purple), Improves performance (teal), Relevant (light blue), and Flexible (dark blue). The chart is set against a light beige background with a vertical striped pattern on the left side.


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eLearning Goals: Certification


- **Content becomes a study guide that reflects the end certification test**
- **Content narrowly focused on the test**
- **Pre-test and self-checks**
- **Competency roadmap – works well in a LMS**
- **Certification Test (a pattern in wrong answers indicates where content needs to be modified)**
- **Learner feedback – how well did the course prepare you for the test?**
- **Matches traditional “school” learning model**


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eLearning Goals: Performance

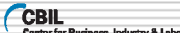


- Content is organized to reflect the learner's job
- Content narrowly focused on job tasks (role based and action-oriented)
- Tip sheets and job aids (measure page hits)
- Best placed in a project portal
- Performance monitoring by supervisor – has the course content influenced job tasks?
- Learner feedback – how did you use the course content on the job?
- Matches many corporate learning needs





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Uses of Rapid eLearning




- Marketing
- Communication / Orientation
- Awareness
- Rapidly changing content
- Short training programs
- Environments needing a constant refreshing and retraining (such as healthcare)
- Legal requirements and mandates
- Surveys
- Part of a blended learning solution





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eCBIL™ Standards




- Design criteria set upfront
- Strong learning goals and content presentation
- Multimedia experience
- Learner involvement and interactions
- Measurable results
- Business case – direct connection between learning and a defined business need
- Learner support services





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eLearning System Selection




- Easy to develop courses, simple to learn how to use
- Easy to maintain or repurpose existing courses, allow modular design
- Easy to add and track learners
- Compatible with learner's environment
- Compatible with other products & systems
- Easy for the learner to use
- 508 accessible




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Why Breeze?

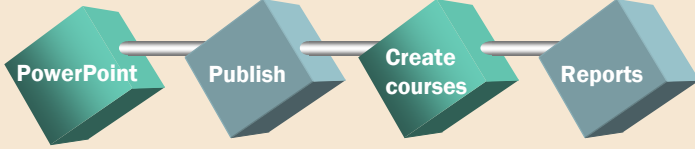
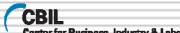


- **Uses PowerPoint for authoring, fast & easy**
 - Reduces time and resource constraints
- **Accessible anytime**
 - Internet access, low bandwidth needs
 - Flash player, firewall friendly
 - Sound card and speakers/headphones
- **Built-in quizzes check understanding**
- **Easy to add audio voice-over and sync with animation**
- **Transmit information quickly and consistently**
- **Section 508 accessible**




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Breeze Process




Audio Text Animation Interactions Quizzes Surveys	Convert PPT to Flash	Enroll users Notify users Monitor course Open/close course	Completions Time in course Quiz scores Survey data
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eCBIL™ Specifications




- Length of Program
- Program Structure
- Testing
- Reports
- Graphics and Animations
- Template
- Disclaimer, Copyright, Legal
- Content
- Music
- Program Evaluation
- External Links
- Participant Materials





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eCBIL™ Checklist




- Content
- Instructional Design
- Interactivity
- Navigation
- Motivational Components
- Use of Media
- Evaluation
- Aesthetics
- Tone





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Is Compelling Training Possible?




- It's not the tools – it's the design
- Rapid eLearning is best for:
 - Broadcasting information
 - Critical knowledge transfer (conceptual learning)
 - When resources are limited and there is a need for high instructional integrity and content urgency
- How does problem solving, analysis, synthesis and critical thinking fit into the picture?




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Demonstrations




- Examples from various materials developed by the Center for Business, Industry & Labor of St. Louis Community College
- To review these later, or show to others, go to:
<http://www.cbil.org/league2006>





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Best Practices – Design/Delivery




- Create reusable templates
- Repurpose existing content
- Focus on “need to know” content
- Link to “nice to know” content
- Integrate pre- and post-program quizzes
- Use blended learning methods
- Remember the end result you’re looking for!




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Best Practices – Instructional Design



- Apply adult learning theory with its emphasis on motivation, relevance, self-management, problem solving, and experiential learning
- Learners need to remain actively engaged in the course content through frequent interactivity, practice, feedback, and reinforcement

Source: “Integrating e-Learning into the Workplace,” Mohd Hishamuddin Harun, Medical Online Sdn Bhd



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Best Practices – Development




- Follow your development process, and make sure someone owns each step
- Analysis
- Design
 - Templates for layout and navigation
 - Storyboard in PowerPoint
- Production
 - Graphics, animations, photos, videos, music, audio
- Implementation
- Evaluation





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Best Practices – Accessibility




- Flash player works with JAWS, Home Page Reader, and Windows-Eyes
- Visual elements must be available
 - Graphics and animations need text equivalents
 - Constant motion from transitions and animations may cause excessive screen reader refreshes
 - Make sure the narration can “stand on its own”
- Narration elements must be available
 - Add the narration transcript as the speaker notes
- Breeze 5 has additional features to enhance the experience for visually impaired users





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Best Practices – Audio

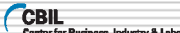


- Always use a written script
- Make narration conversational
- Vary the voices – male/female, tone, inflections
- Narration should build on key points, not just read the text
- Synchronize narration with text and graphics
- Consider using music
- Narration should be able to stand on its own (for accessibility)





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Best Practices – Text



- Follow basic guidelines for PowerPoint presentations regarding font size, type face, type colors, amount of text
- Sans Serif usually works better (Arial, Franklin Gothic, Verdana, Tahoma, etc), 26 points+
- Make your program look “un-PowerPointy”
- Create slide titles for all slides (appears in the outline display)
- Include narration as speaker notes (for accessibility)



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Best Practices – Graphics

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- Graphics need a similar look and feel
- Minimize clip art
- Take/use actual photos when possible
- Enter alt text for each graphic for accessibility



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Best Practices – Animation/Video

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- Animations should add to, not detract from, the message
- Subtle transitions only
- Understand and test the impact of your graphics, animation, and video decisions on low-bandwidth users
- Video only when the message cannot be communicated any other way – make it short!




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Best Design Practices – Interaction


- Create meaningful interactions
- Interactions have to be planned
- Provide custom feedback
- Use techniques such as rhetorical questioning
- Allow for non-linear progress (hyperlinks and action buttons)




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Best Practices – Technical


- Consider available bandwidth of users
- Follow security best practices for server
- Use appropriate LMS database store (SQL)
- Customize look of eLearning interface for your organization
- Always review the published version before releasing it to your participants
- Identify the software tool's unique “quirks” and determine how to handle them upfront




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Best Practices – Blended Approach


- **Set up sessions for learners to discuss what they had learned and how they could apply it to their jobs**
- **Knowing in advance there will be discussion sessions reinforces learner focus and accountability**




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Future Trends

- **Courses about a specific product or business process need to dynamically link to core critical documents (job aids, procedures, etc)**
- **Integration of document management and learning**
- **Content needs to be indexable by document management systems**
- **Online communities of practice**




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Latest Trends




- Podcasts (audio and video)
- Wikis
- Blogs
- Webcasts
- Learning on game platforms (PlayStation Portable, Xbox, etc)

- These are only enablers, new technologies only succeed if they help people learn
- Always goes back to the quality of the learning experience





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Challenges and Opportunities



- How could rapid eLearning work in your organization? With your workforce clients?
- Are there clearly identified needs? What approach could be taken to developing, implementing and evaluating the business case?
- Who is responsive/excited about the possibilities?
- What are the challenges?
- What are the next steps?



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- For more information contact us:
www.cbil.org/league2006
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eLearning Applications for Workforce Training and Development

Questions?



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