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THE ELEARNING GUILD'S

ONLINE FORUMSSM

Getting Started with eLearning Standards and SCORM

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An Introduction to e-Learning:
The A to Z for Getting Started



402 Getting Started With eLearning Standards and SCORM

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September 2007**



Presentation Outline

- Standards – “Can’t live with them, can’t live without them”
- What’s all the “hype” about eLearning?
- SCORM – Another acronym?
- eLearning for your organization– The toolbox approach
- Best Practices – who gets to define “Best”
- Will eLearning replace classroom training?
- Resources

Rules of engagement

- Chatter is OK! 😊 - feel free to enter text in the chat area that is relevant to the topic or discussion.
- Your input is important to me! – Please participate in the questions and polls.

Why Standards?

- Historical data indicates that the launching point for any new time period of innovation includes the adoption of common standards
 - Railroad tracks
 - Telephone
 - Video Tape
 - Email protocols
 - Internet

Types of Standards...

- De jure standards – by directive or law
- De facto – when a critical mass or majority choose to adopt and use a specification
- The ideal state is when a de jure standard is also de facto!
- What standards would you be least willing to give up or switch away from? (answer in the chat box)

eLearning...What is it?

- Simply stated it is training or learning that occurs via on-line and/or offline technologies
- In 1999, John Chambers, CEO Cisco Systems stated "The next big killer application for the Internet is going to be education. Education over the Internet is going to be so big it is going to make e-mail look like a rounding error."

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- Has eLearning become a “Killer App?”
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- eLearning is no longer just for the early adopters and those who wish to be on the leading edge...
- It should be very strategic to the organization and not just implemented ad-hoc

Strategic initiatives should adhere to standards

- These industries do:
 - Manufacturing
 - Healthcare
 - Airline
 - Financial
 - Etc...

When eLearning Became Strategic

Advanced Distributed Learning (ADL) 

- The Office of the U.S. Under Secretary of Defense for Personnel and Readiness (OUSD P&R) was tasked with leading a collaborative effort to harness the power of information technologies to modernize structured learning. Through the sponsorship of the OUSD P&R, the creation of the Advanced Distributed Learning Initiative was formed as a developer and implementer of learning technologies across the Department of Defense (DoD).
- ADL employs a structured, adaptive, collaborative effort between the public and private sectors to develop the standards, tools and learning content for the learning environment of the future. The vision of the ADL Initiative is to provide access to the highest-quality learning and performance aiding that can be tailored to individual needs and delivered cost-effectively, anytime and anywhere.

ADL Strategy

- Work closely with industry, government, and academia to promote common, open international specifications and standards that will enable reuse and interoperability of learning content
- Promote widespread collaboration that can satisfy common needs
- Enhance performance with emerging learning technologies
- Promote a coordinated implementation process with incentives for organizational and cultural change

So what is SCORM and how did it evolve?

- Enter your answer in the chat box

So what is SCORM and how did it evolve?

- **Sharable Content Object Reference Model**

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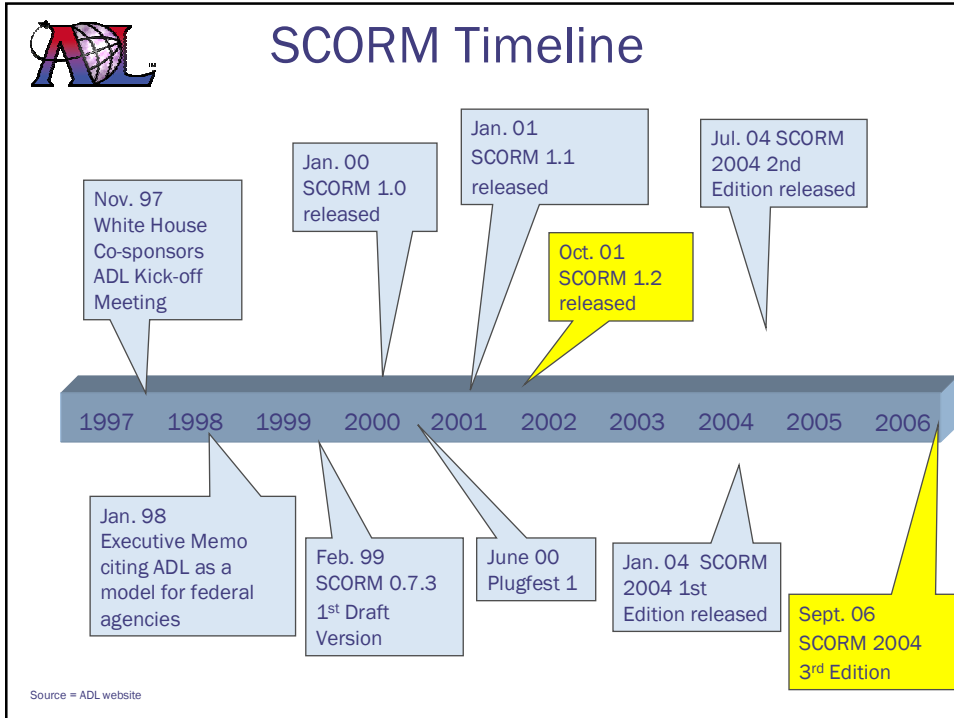
- **Key Benefits:**

- Allows students and educators to scale, share and reuse learning content
- Makes learning content discoverable through interoperability with content repositories
- Enables the development of adaptive learning systems that can assemble content to meet the learner's needs "on the fly"

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- Technically, it's currently a specification that includes multiple standards

Poll 1



When is SCORM Important?

- When an organization wants to create:
 - Standards based content
 - Sharable content
 - Reusable content
 - Searchable content
 - Customizable content
 - “Sellable” content



SCORM Principles (aka the “ilities”)



Interoperability: the ability to take instructional components developed in one system and use them in another system.



Accessibility: the ability to locate and access instructional components from multiple locations and deliver them to other locations.

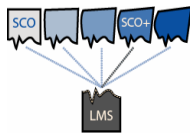


Reusability: the ability to use instructional components in multiple applications, courses and contexts.

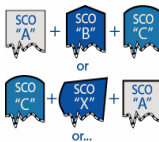
SCORM Principles (aka the “ilities”)



Durability: the ability to withstand technology changes over time without costly redesign, reconfiguration or recoding.



Maintainability: the ability to withstand content evolution and changes without costly redesign, reconfiguration or recoding.



Adaptability: the ability to change to satisfy differing user needs.

SCORM Benefits

- An object-based approach for developing and delivering instructional content
- Interoperability of these objects across multiple delivery environments
- The ability to craft sophisticated learning strategies based on the learner's mastery and progress
- The means to package learning content and instructional strategies for import and export
- The means to tag content so it may be found

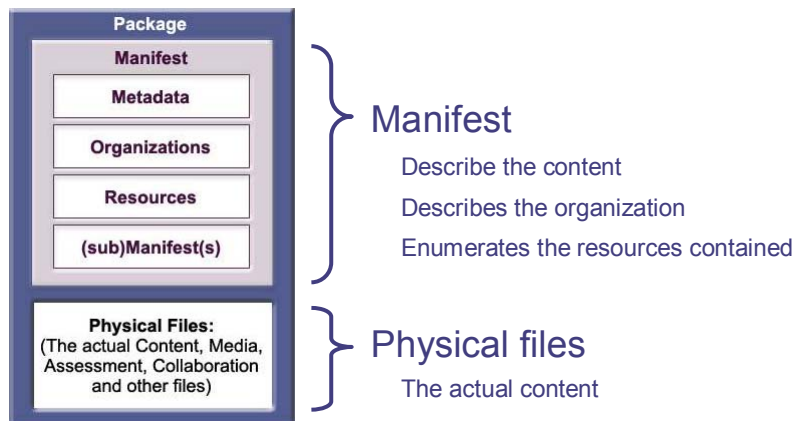
Key SCORM 2004 Concepts

- Shareable content
- Communications
- Sequencing
- Metadata

SCORM enables content to be shared through

- The Content Model
- Content Aggregation
- Content Packaging

Content packages contain two components



Communications

- SCORM enables content to interoperate with diverse SCORM Conformant Learning Management Systems (LMS) through
 - The SCORM Run-time Environment
 - Launch
 - Application Programming Interface (API)
 - Data Model

Sequencing

- SCORM enables the delivery of learning activities in an instructionally meaningful manner through sequencing.
 - Designers may specify sequencing behaviors at authoring stage
 - Activities may be sequenced at time of delivery based on a learner's actions or performance
 - Sequencing behaviors are external from the content to facilitate reuse

Metadata

- Metadata has several important functions within SCORM:
 - Describes what a content object or package contains
 - Specifies properties of a content object such as language or level of difficulty
 - Enables meaningful searches for content

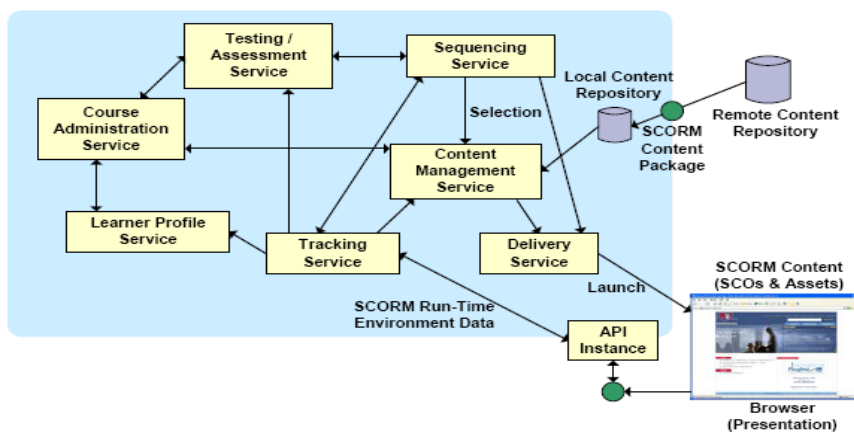
Learning Management Systems (LMS)

- A suite of functionalities designed deliver, track, report on and manage learning content, learner progress and learner interactions.

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- Most are **SCORM 1.2** conformant but not yet **2004** but that's OK!

The Big Picture



So How Do You Create SCORM Content?

- Develop a SCORM content authoring “tool box”
- Many good tools available
- Use the right tool for the right project
- “Don’t use a screw driver as a hammer!”

Content is “King”

- Many organizations already have existing content from instructor led training courses
- Subject matter experts within an organization typically already have their instructor led training content in some sort of electronic format
- To Create or Convert?
- Content companies offer libraries of off the shelf content
- Which is right for your organization?

An example...

- SCORM content creation, conversion, packaging, and assessment with THESIS.



THESIS™
www.GetTHESIS.com

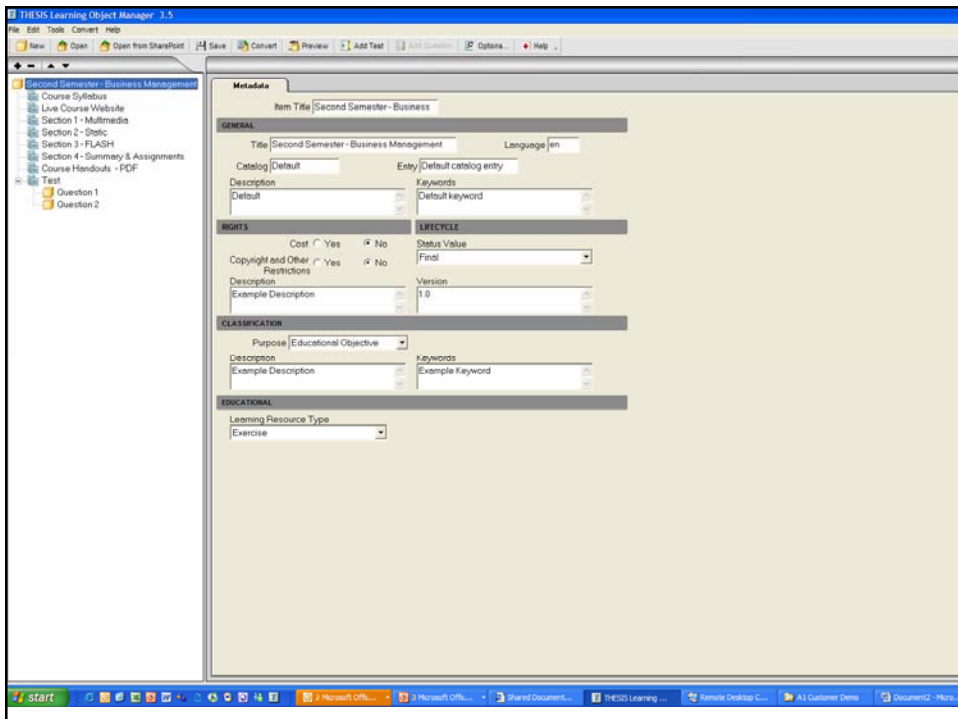
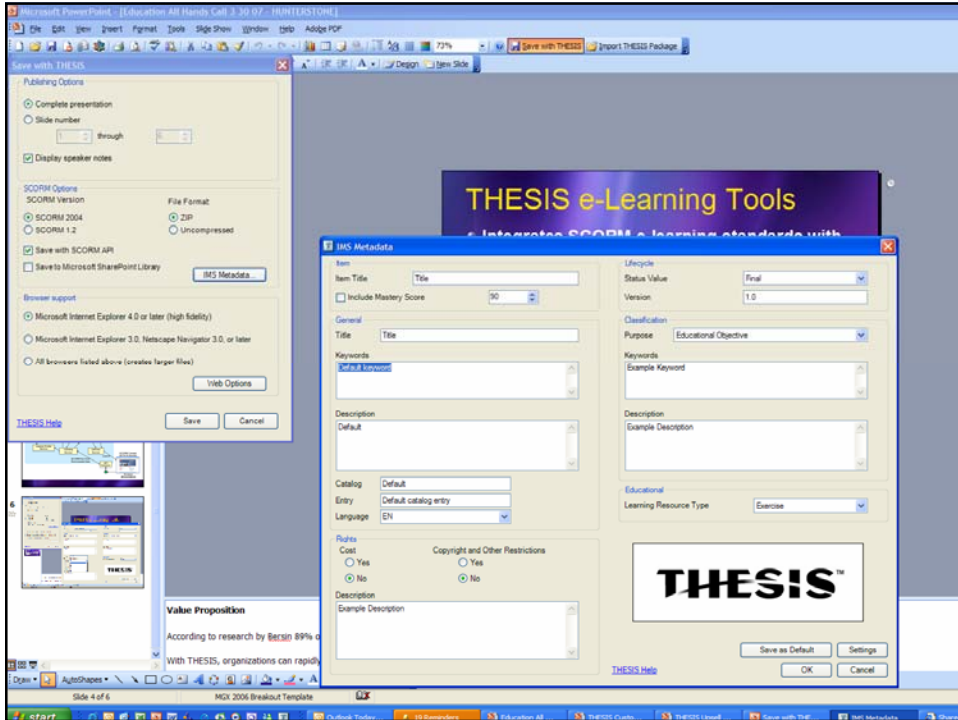
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The screenshot shows a Microsoft Word document titled 'Press Release.DOC'. The 'Save with THESIS' dialog box is open, showing options for 'Publishing Options', 'PurePage', 'SCORM Options', and 'File Format'. The 'IMS Metadata' dialog box is also open, showing fields for 'Item Title', 'Title', 'Keywords', 'Description', 'Catalog', 'Entry', 'Language', 'Lifecycle', 'Status Value', 'Version', 'Classification', 'Purpose', 'Keywords', 'Example Keyword', 'Description', 'Example Description', 'Educational', 'Learning Resource Type', 'Rights', 'Cost', 'Copyright and Other Restrictions', and 'Description'. The THESIS logo is visible in the bottom right corner of the dialog boxes.

Motiva
*Microsoft Student with Encar
and learning enviro*

SAN DIEGO — July
helping schools break through
Microsoft® Student with Encar

1.5 today at the annual National Educational Computing Conference. A large majority of today's
teachers (91 percent) believe that technology positively affects their students' performance¹



Best Practices – Who defines “Best”

- Enter your answer in the chat box

Best Practices – Who defines “Best”

- Learners
- Instructional designers
- Management and other stake holders
- Not all content is suitable for eLearning
- Each organization must determine its own Return On Investment for eLearning

Look who is adopting SCORM

- US Department of Defense (DoD)
- Government Agencies
 - IRS, CDC, DoL, NGB, NSA, USPS, TSA, VA, NASA, TSWG, NATO, others
- Industry
 - Daimler Chrysler, IBM, Microsoft, Boeing, LG, Verizon, Delta Airlines, Oracle, Cisco, McDonalds, Home Depot, others
- International
 - Australia, Canada, Asia, Europe, Latin America, others

Case Study

- *“THESIS Transforms Microsoft Office into a Dynamic Tool for 21st Century Learning”*
 - Facing a “Build or Buy” decision Microsoft licensed SCORM technology from HunterStone in the form of THESIS Lite. www.Microsoft.com/LearningEssentials
 - Available in 12 languages to Microsoft Education Customers around the globe
 - www.GetTHESIS.com/CaseStudyMS.htm

Is it possible for SCORM to be a du jour and defacto learning standard?

- For the US Government, European Union, and NATO it already is.
- By the end of 2008 all UK all schools are required to have IT support for learning. By 2011 they must have a virtual learning environment.
- Korea's education system was the first to adopt SCORM on a nationwide education basis.

What's the future look like for SCORM?

- The ADL is working with ISO to facilitate adoption of SCORM as a national standard by other countries.
- ADL is exploring ways to open SCORM's future evolution and maintenance to a proposed International Consortium for Interoperability in eLearning (ICIL) and move it out of the DoD.

Will eLearning Replace Classroom Instruction?

- I hope not!
- Technology enabled learning has tremendous benefits for organizations
- Traditional classroom training has components that can not be replicated electronically
- "Teachers will never be replaced by technology - but teachers who use technology will replace those who do not." - B.W. Seibert
- Programs that include both classroom training and eLearning are called "Blended Learning"

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Poll 2

Resources & Industry Experts

- eLearning Guild – www.eLearningGuild.com
- ADL – www.adlnet.gov
- Brandon Hall – www.brandonhall.com
- Bersin & Associates – www.bersin.com
- The Masie Group – Elliot Masie www.masie.com

Questions via chat

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- Corporate site www.HunterStone.com
- Product site www.GetTHESIS.com

Thank you!