

## Defining Sharable Content Objects

(learning objects)

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## Overview

- Then and Now
- Why sharable content objects?
- Object size
- Resulting thoughts
- Current Project

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## Then (Plugfest #1 6/2000)

- SCORM 1.0; AICC specs.; handful of IMS specs.
- Quality of meta-data?
- Collaboration meta-data
  - Role of collaboration and facilitation
- Potential for course personalization/adaptation
  - LMS intelligence; learner profile
- Quality of course development
  - Content development separate of context
- Role of instructional designers and content providers

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## ...and Now (Techlearn 10/2001)

- Original specifications have evolved (SCORM 1.2).
- Variety of new IMS working groups and specifications (Learning Design; Repository; Question & Test; Accessibility)
- Technologically have a starting point to enable reuse and interoperability
- Now with learning...
  - "We can rebuild them..."
  - "We have the technology..."
  - "Better...stronger...faster."
  - Cost of 6 million?



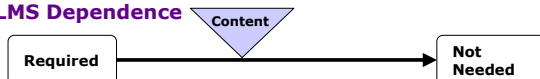
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## Why SCOs & SCORM?

- Ultimately desire to be LMS agnostic with content delivery and content management
  - Increase quality of courses delivered
  - Reduce course maintenance

### LMS Dependence



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## Why? A Simple Estimate

- Generic course development
  - 1 developer/designer = \$100/hr.
  - 100 hr/1 hr. of course
  - \$100 x 100 hr. = \$10,000/1 hr. course
- If 5% of content was reused without rework
  - .05 x 100hr. = 5 hr.
  - 5 hr. x \$100 = \$500 in savings
  - The more content able to reuse, the less development time, the greater the potential cost savings, and the higher value of the content reused.

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## A Question of Size

- What are sharable content objects (sco)? Various definitions
- Always wait for the "whatchamacallit" description to come in a definition.
  - chunk
  - piece
  - digital media
  - entity
  - resource
  - granules
  - nugget
- Its deliberate. Seemingly no limitations. But it is part of a whole, where the "whole" is left up to us to determine through context.
- Online Thesaurus: <http://www.merriam-webster.com>

### Some Others?

- clod
- clump
- gob
- hunk
- wad



## Resulting Thoughts

- One way to create a course? One way to create a sco?
- Two groups within instructional design
  - Waiting for a definition/steps
  - Develop design format and run with it
- What are some characteristics?
  - Objective-Based (initial suggestions are that this is required to be meaningful)
  - Presentation
  - Activity
  - Assessment
  - Meta-data is not currently required to create a SCO, but if you want to enable discoverability within a content catalog its needed.
  - SCORM is self-paced in focus at present and does not yet address collaborative activities (assignments, discussions, feedback, etc).



## Preliminary Learning Objects Site

<http://www.academiccolab.org>

The screenshot shows a web browser window with the title "What are Learning Objects?". The page content includes a navigation menu on the left with items like "What are Learning Objects?", "Why Learning Objects?", "Planning Learning Objects", "Learning Object Construction", "Learning Object Metadata", "Learning Object Delivery", "Learning Object Evaluation", "Learning Object Tools", "Discussion Tools", "Assessment", and "Resources". The main content area has the heading "What are Learning Objects?" and text explaining that although definitions vary, there are many different interpretations. It lists characteristics of learning objects: self-standing, reusable, binary digital or electronic content, and self-describing. It also lists the "Intentional Components of a Learning Object": Instructional Objectives, Content, Learning Strategy Activity, and Assessment/Feedback. A footer at the bottom provides contact information for the site.

