Introduction to Learning Objects

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Centra is an e-Learning and Collaboration infrastructure company

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Designing Learning Objects

- Agenda
  - Why Learning Objects?
  - What are Learning Objects?
  - Let us see some examples!

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Why Learning Objects?

Traditional methods of developing instructional content often result in the production of large, monolithic courses. Typically, these courses are characterized by:

- instructor-centered design/development/delivery
- instructor-controlled content flow
- linear, fixed-path presentations
- difficulty in changing or adapting content

There is a growing realization that these methods are inadequate for learning in today's business environment.

Why Learning Objects? – The Learner's Perspective

- Demand for customization and personalization to provide just-in-time and just-enough content
- Need for performance support on-the-job (at the moment of need)
- Need for granular levels of training individualized to learner needs, interests, and learning styles (unavailable in traditional monolithic courses)

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Why Learning Objects? – The Author's Perspective

- Ease of collaborating, sharing and reusing content assets over the Web
- Need for rapid creation of content
- Ease with which subject matter experts can assemble/update content
- Traditional approach less conducive to content reuse, granularity, and Web deployment

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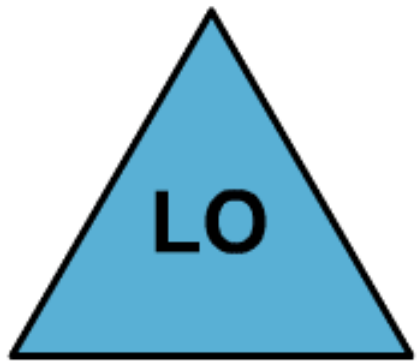
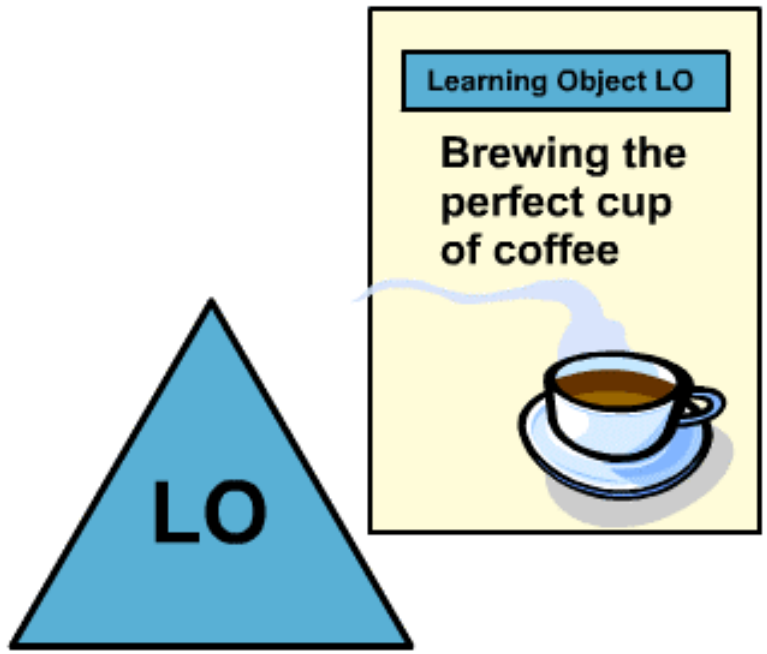
What are Learning Objects?

- Small “Chunks” of Instruction delivered online



What are Learning Objects?

- Small “Chunks” of Instruction delivered online
- Each learning object is self contained in its ability to help the learner achieve a demonstrable performance objective



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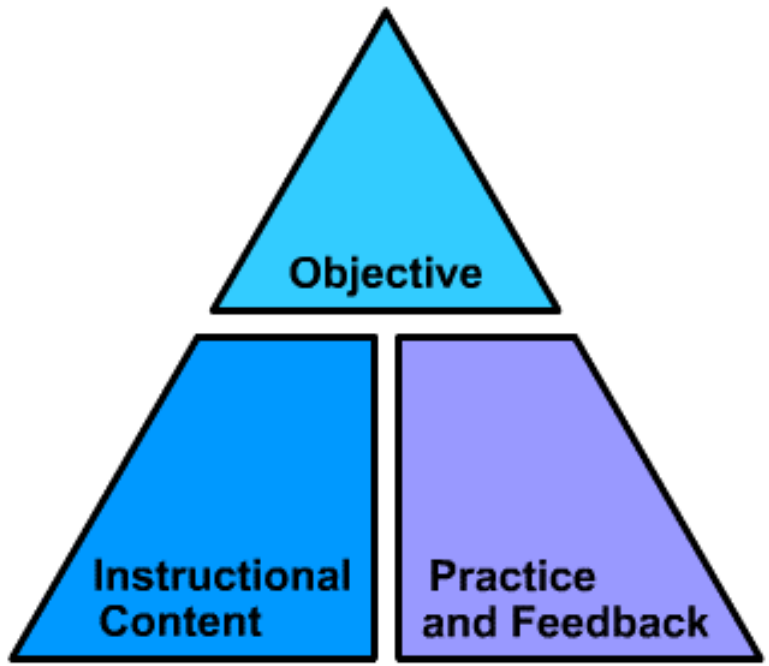
Anatomy of a Learning Object

- Centered around a learning objective
- Content/information supports the objective and promotes the achievement of the learning outcome
- Practice/Feedback ensures mastery



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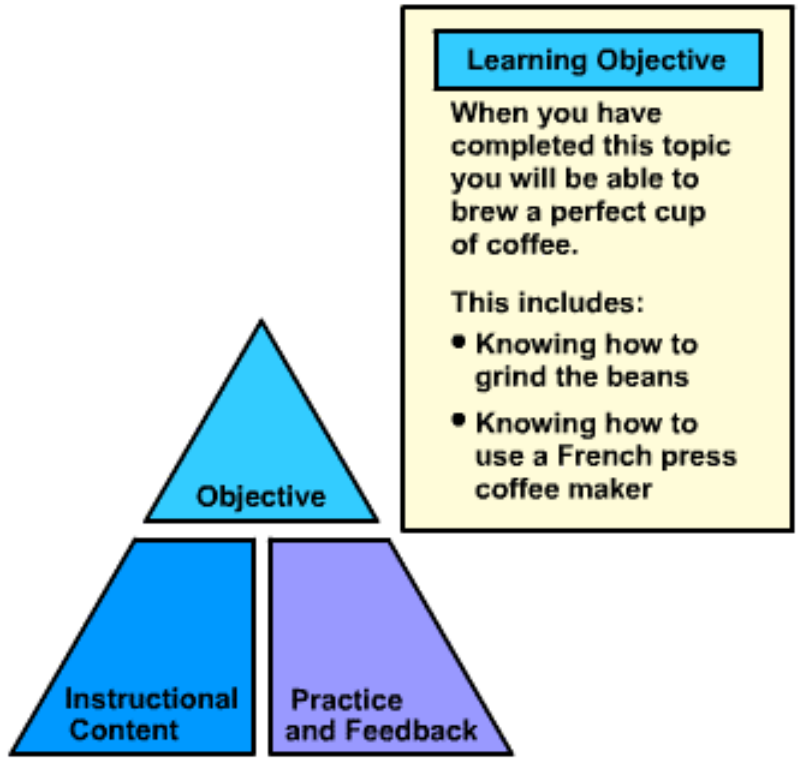
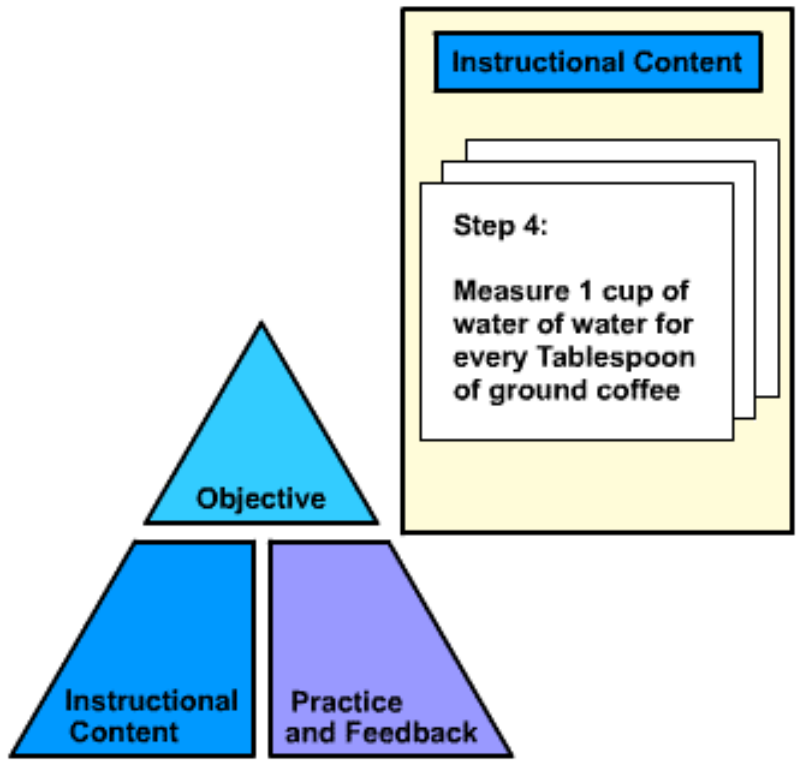
Key Elements of a Learning Object: Learning Objective

- Learning Objective is the root which holds an instructional sequence together



Key Elements of a Learning Object: Instructional Content

- Instructional Content may include a combination of text, graphics, video, animation, etc.
- The instructional strategy & learning type determines the interactivity/engagement



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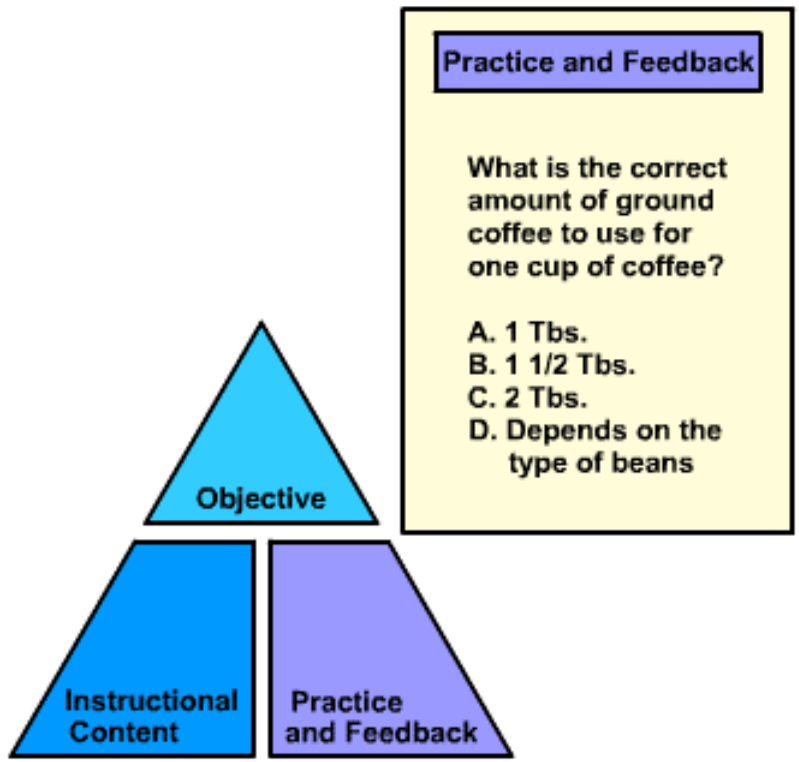
Key Elements of a Learning Object: Practice & Feedback

- Difference between information and learning = support for assessment & measurement of success and remediation



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Instructional Patterns & Templates

- Learning Objects may use different instructional strategies to promote learning (understanding, retention, and application)
- Instructional Strategy may be defined as a set of rules (based on sound instructional design, cognitive science) with which learning content may be structured or sequenced
- Different instructional strategy may be applied based on the task to be learnt or the learner's preference and style
- Different tools/templates may be used to create different Learning Objects

Simple text based objects

Simulations & Games

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Economies of Scale – Accessing Learning Objects

- The Learner can access learning objects in an on-demand fashion over the web

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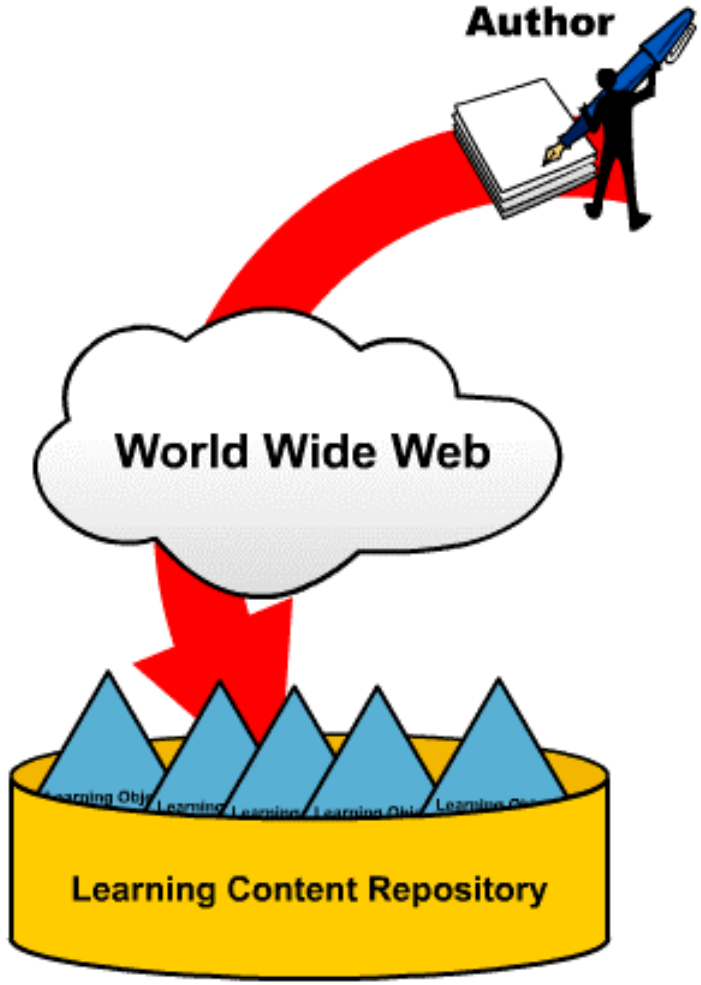
Economies of Scale – Depositing Leaning Objects

- The Author or SME can encapsulate expertise in the form of Learning Objects and submit it over the Web.



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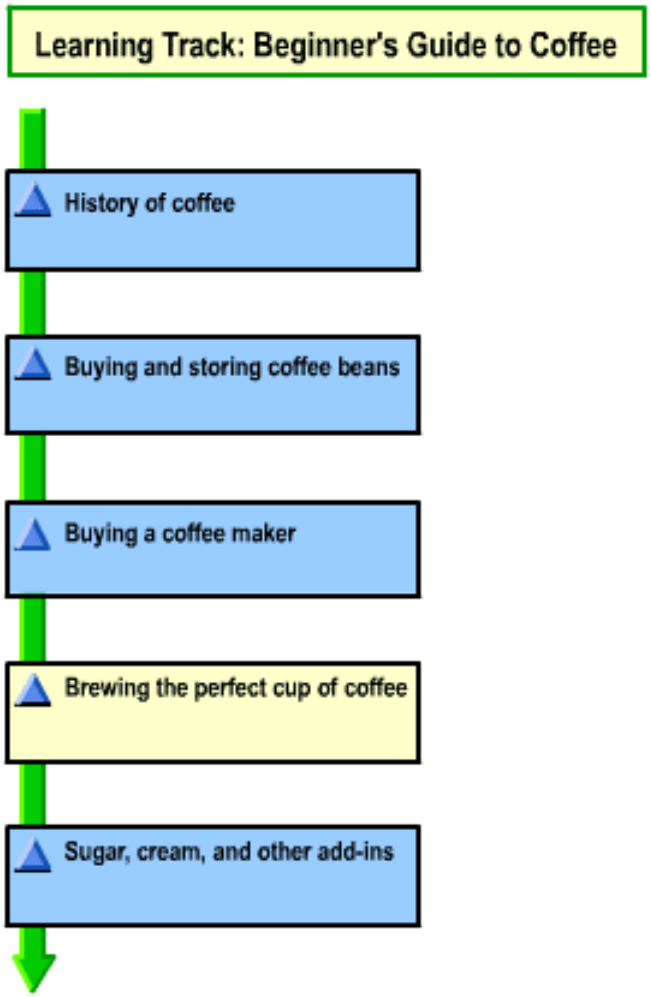
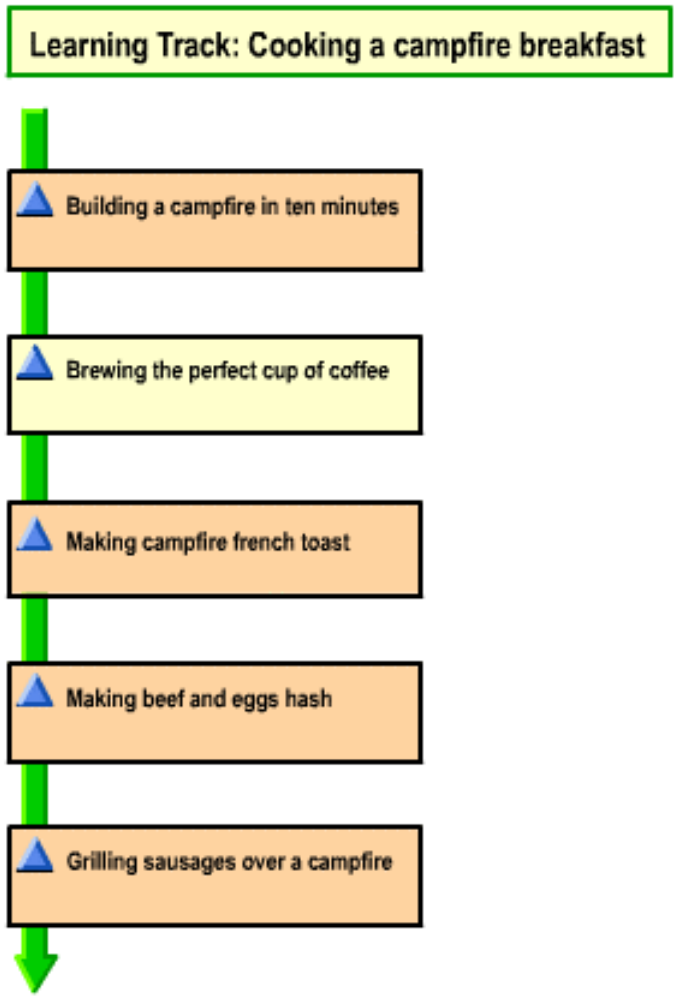
Aggregating Reusable Learning Objects - Learning Tracks





- Learning objects are like “Lego building” blocks – they can be combined and recombined to create customized Learning Tracks

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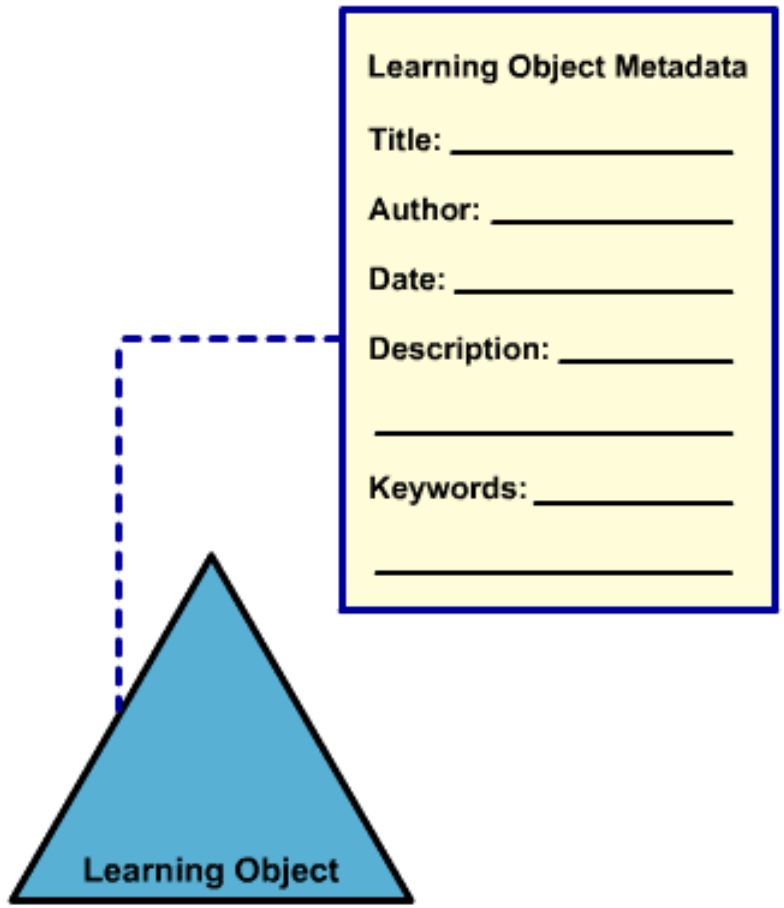
In Search of Learning Objects – the Invention of Meta-data

- Meta-data is data about data (in this case learning content “nuggets”



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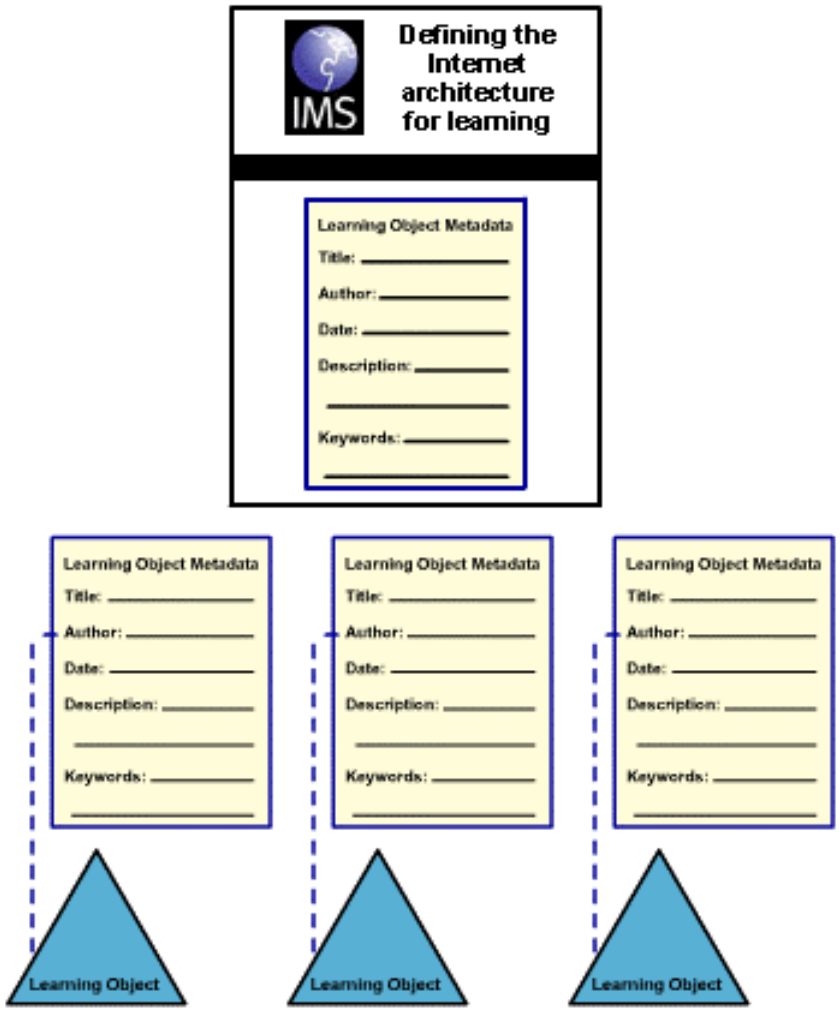
Meta-data Standards

- Inventing the Dewey Decimal System for Learning Objects



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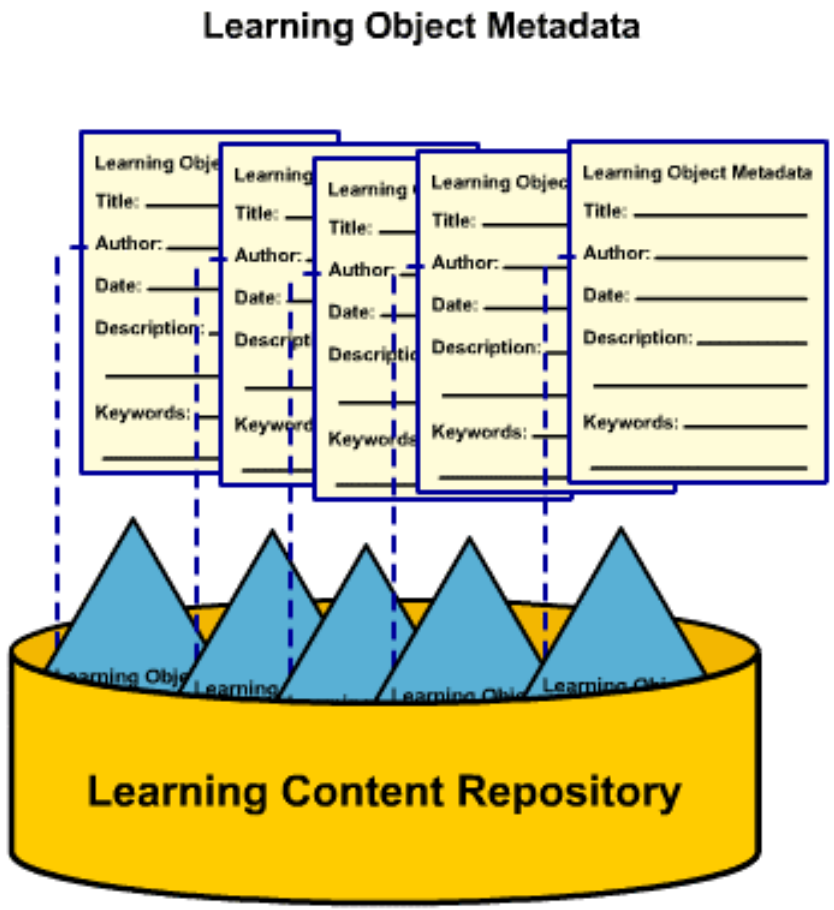
Building a Search Index Around Learning Objects

- The goal is simple – just-in-time, just-enough learning



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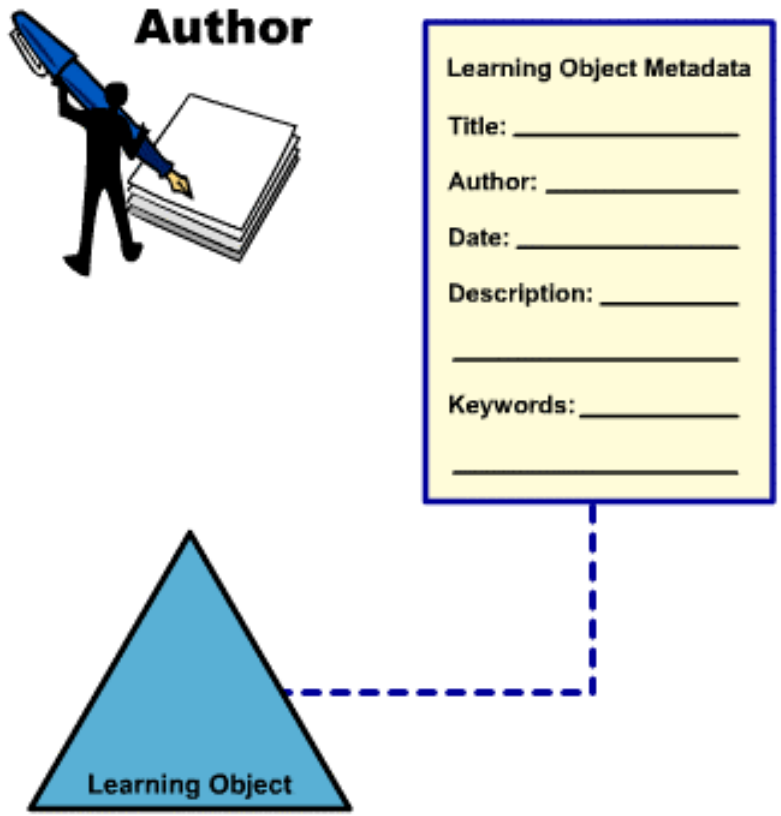
Tagging the Learning Objects

- The Author or SME tags each Learning Object with Meta-data properties
- Building a culture around tagging and reusing Learning Objects
- Leveraging technology to manage the economies of scale



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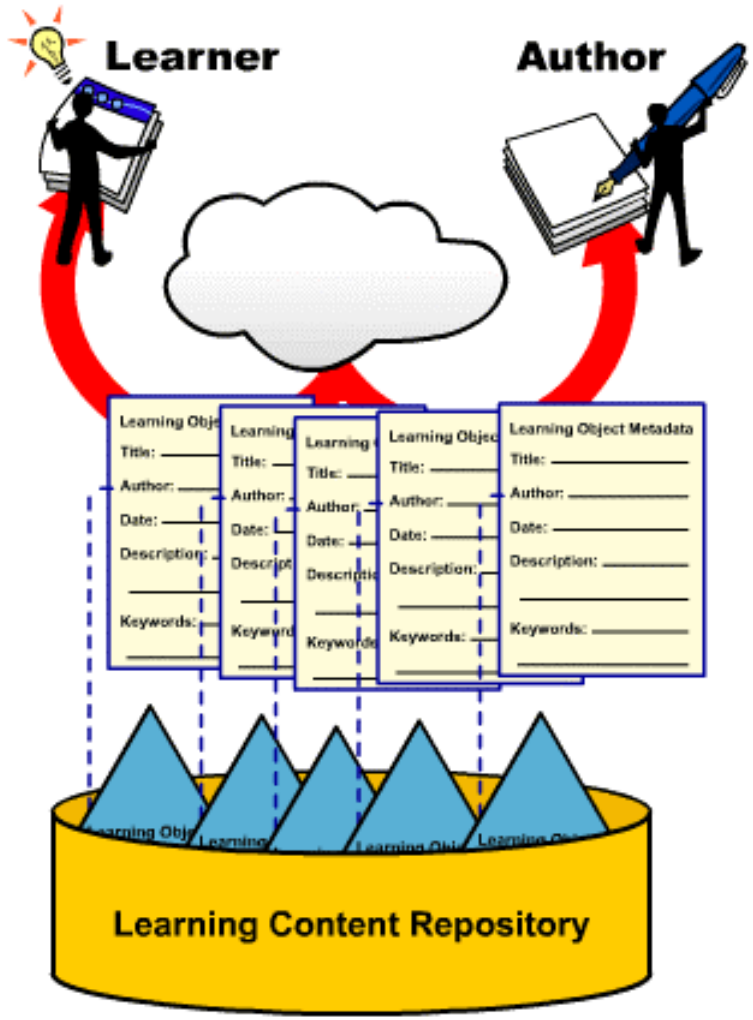
Building Learning Communities

- Meta-data - in the service of content developers and learners
- Communities of Learners & Authors



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