

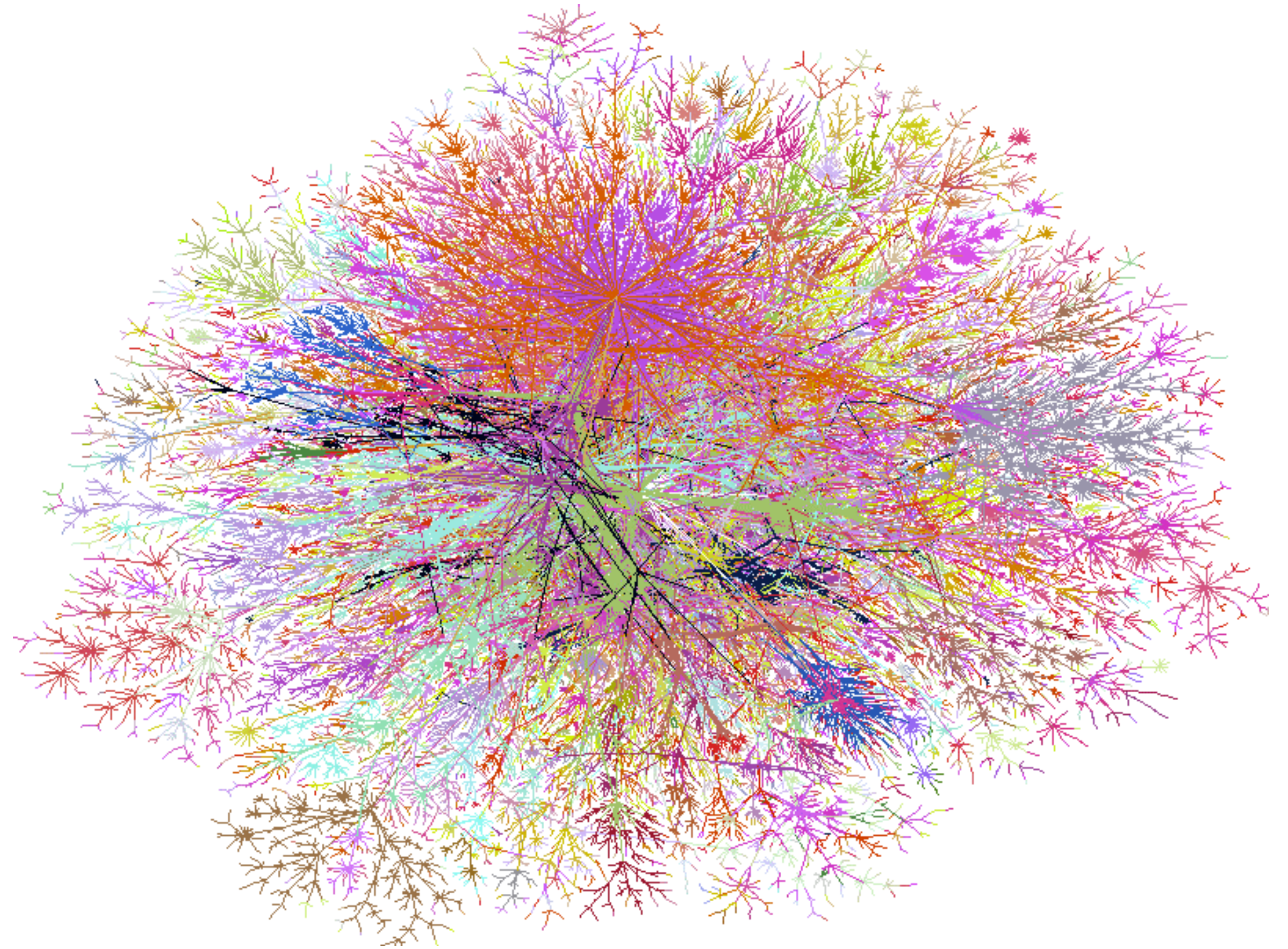
Borderless e-Contents



Prof Alain Senteni, WITFOR Education Commission, Delhi, 17th April 2012

Borderless e-Contents

- eContent history at a glance
- One size *DOES NOT* fit all
- Learning Objects
- Evaluation criteria
- Repositories
- HBMeU case study



large scale e-contents history, at a glance



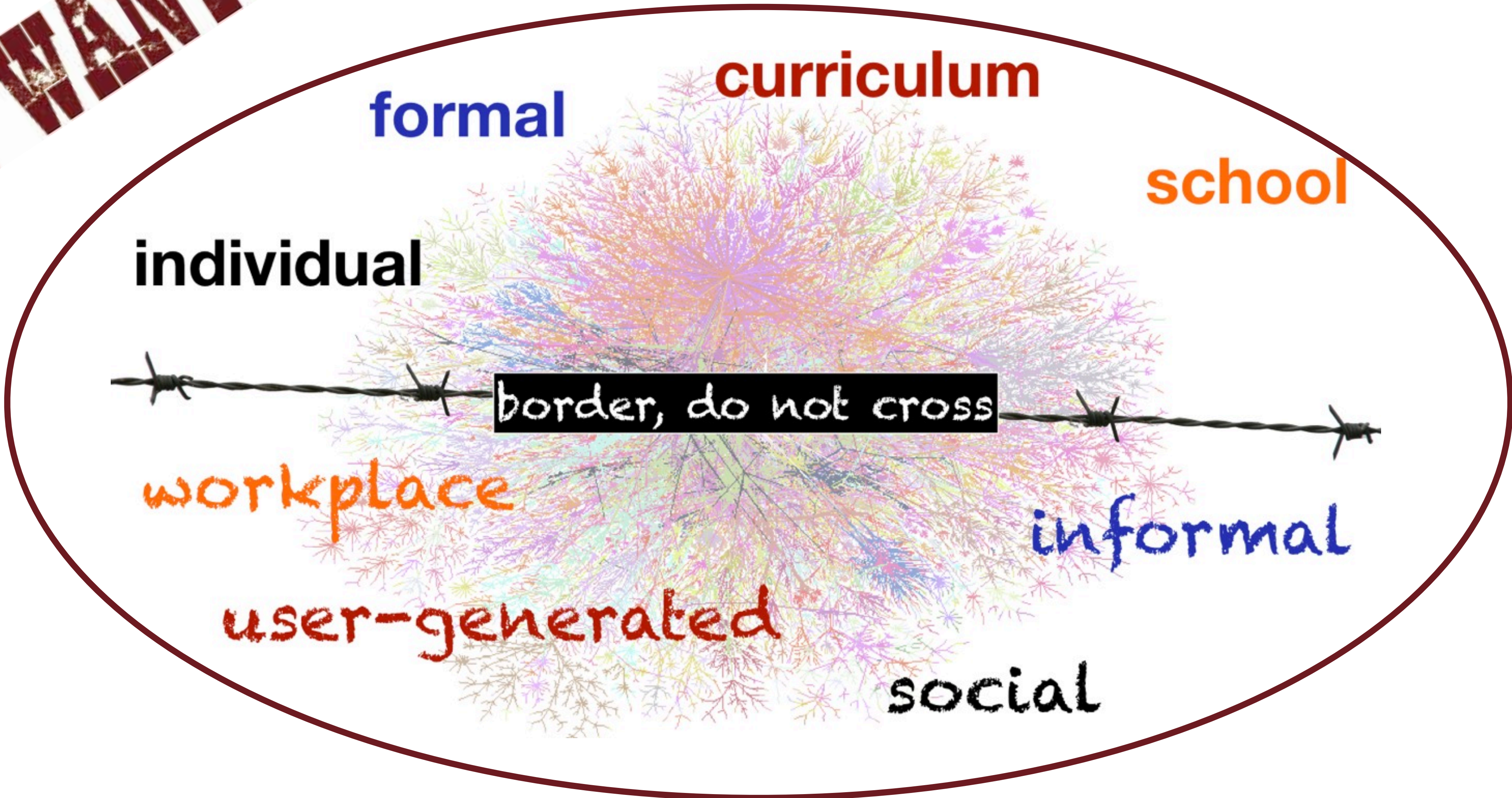
3rd generation [process driven] Knowledge as a dynamic process - Learning as knowledge creation

increased sustainability

**e-Contents development,
from a content-driven approach
to a process driven one ?**

**2nd generation [content driven]
Knowledge as a product**

NOT WANTED



formal

curriculum

school

individual

border, do not cross

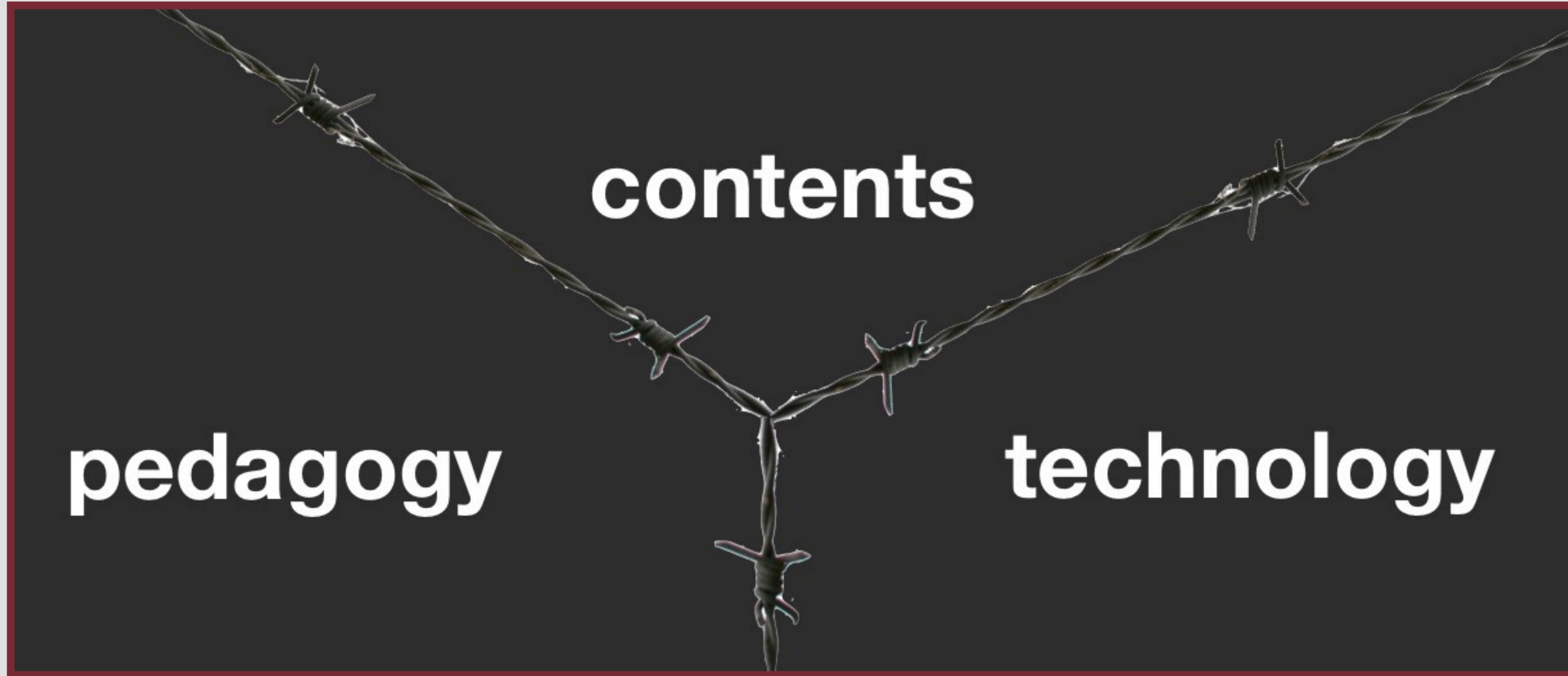
workplace

informal

user-generated

social

NOT WANTED



I 

contents

pedagogy

technology





traditional curriculum



top-down transmission



passive recipients of the teacher's knowledge



NOT WANTED

user-generated content



bottom-up participation



proactive knowledge builders



HIGH QUALITY



traditional
curriculum



POOR QUALITY

user-generated
content



?????



NOT WANTED



We want QA and accreditation frameworks that allow to validate user-generated e-contents and integrate them into academic programs.



**traditional
curriculum**



**user-generated
content**





**We want a mix of high quality e-contents
AND user-generated dynamic contents
AND reliable e-learning materials
AND engaging activities.**

I

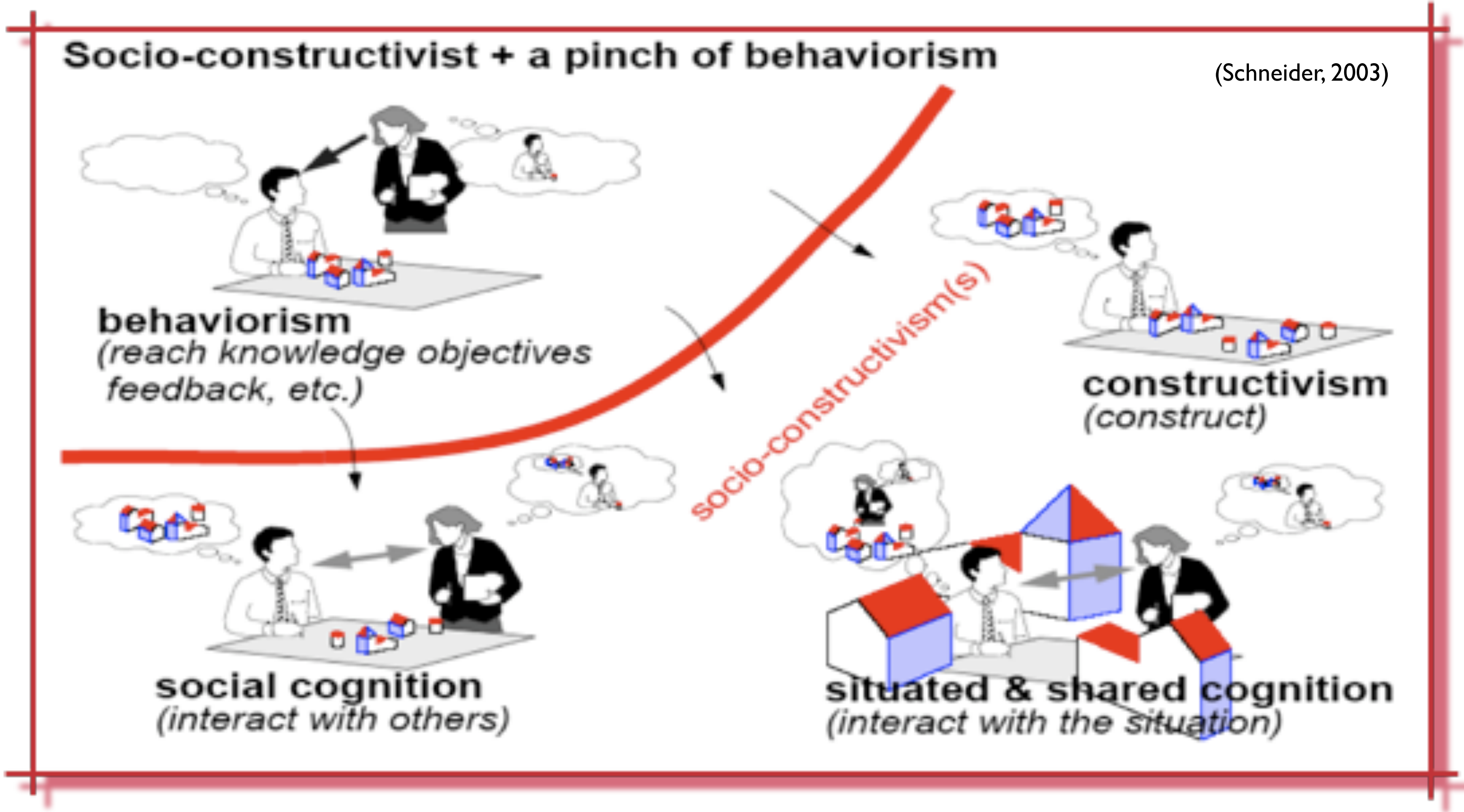


**We want e-contents that can be recycled,
so that we do not need to re-invent
the wheel all the time.**

I



We want blended e-contents, combining traditional perspectives with socio-constructivist ones.



SCHOOL OF THE FUTU RE



traditional school

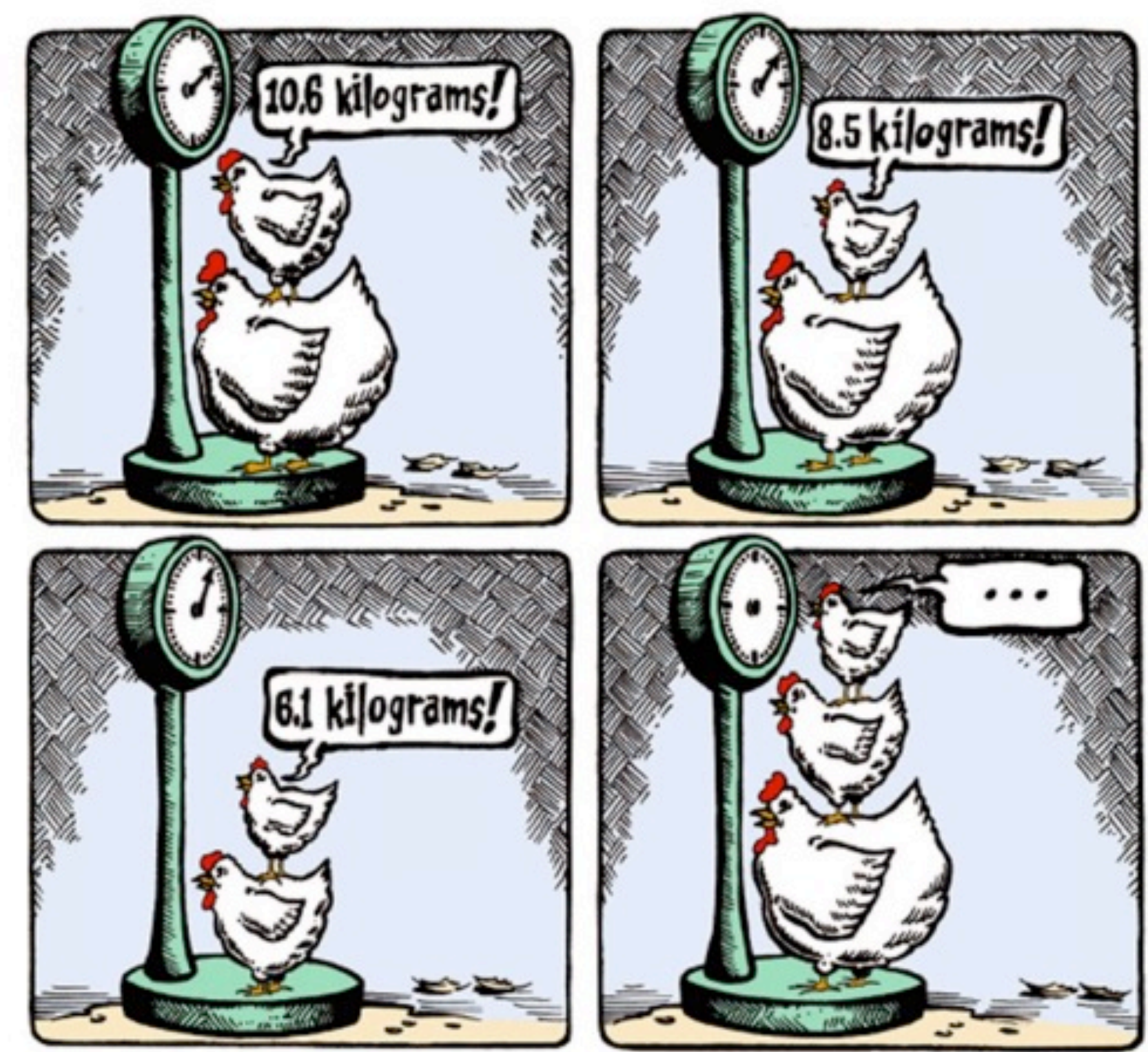


I  to bridge the gap





learning object ?



<http://www.uwlax.edu/faculty/kosiak/projects/index.html>

traditional school



yes, learning object



6.5 kg



4.1 kg



2 kg

from e-contents to learning objects, or how to ...



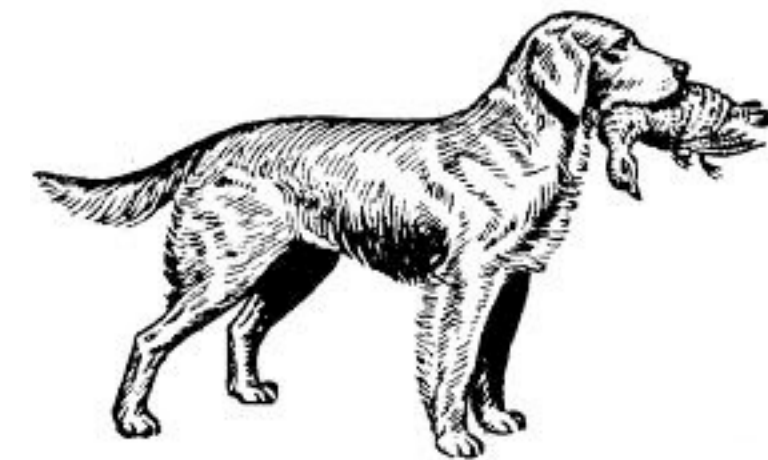
categorize



STORE



classify



retrieve



reuse

...e-contents

e-Contents as Learning Objects

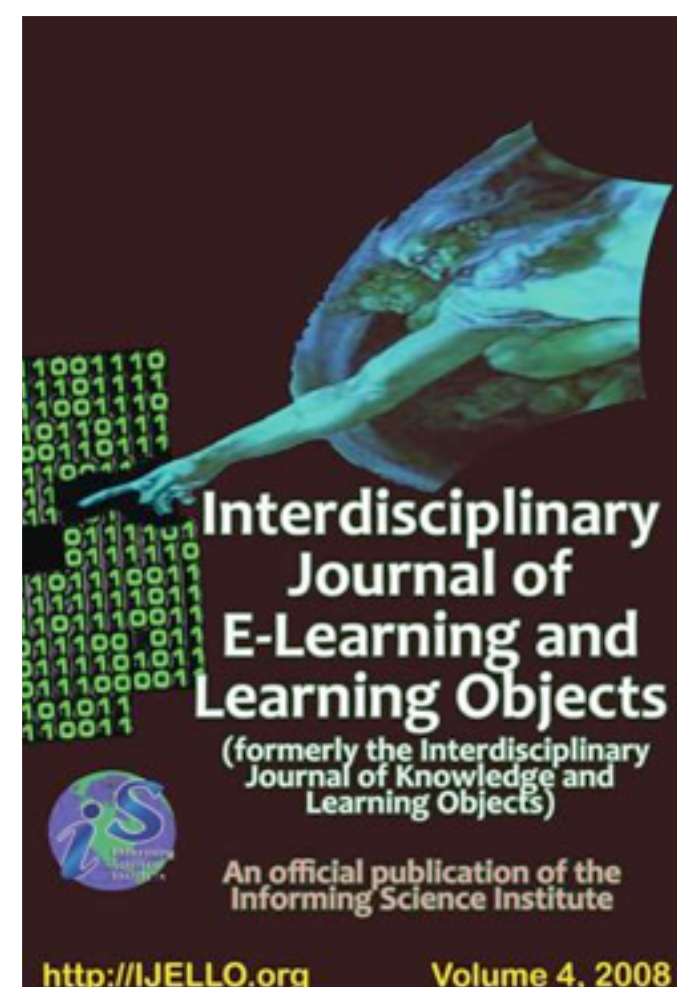
The term Learning Object [LO] was first popularized by Wayne Hodgins in 1994 when he named the CedMA working group "Learning Architectures, APIs and Learning Objects".

An LO is “a discrete reusable collection of content used to present and support a single learning objective.”

Peter Jacobsen (2002)

“Reusable Learning Objects- What does the future hold?”

LOs have become the Holy Grail of content creation and aggregation in the field of computer-mediated learning.



Why Learning Objects ?



- interoperable (thanks to **standards**)
- reusable (thanks to **CC, OER**, etc)
- easy to retrieve (thanks to **metadata**)

Learning objects (LOs) facilitate the (re)-use of educational content online.

Internationally accepted specifications and standards make them interoperable and reusable by different applications and in diverse learning environments.

Metadata (tags, index) describe them, facilitate search and make them accessible.

Evaluation Criteria

Pedagogical Quality

Content clarity and conciseness, instructional strategies aligned to the learning objectives, appropriate media according to target audience, etc...

Ergonomy

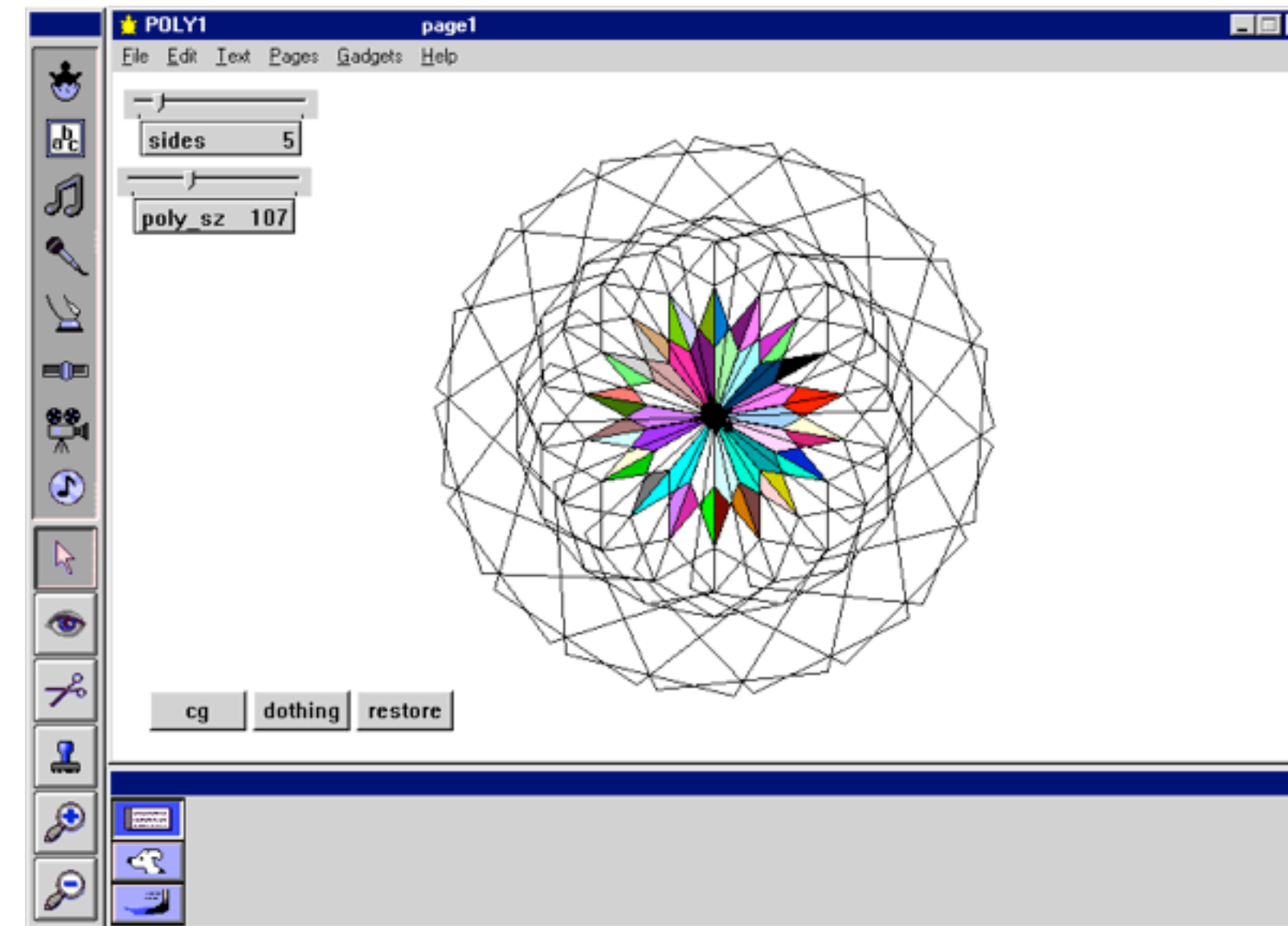
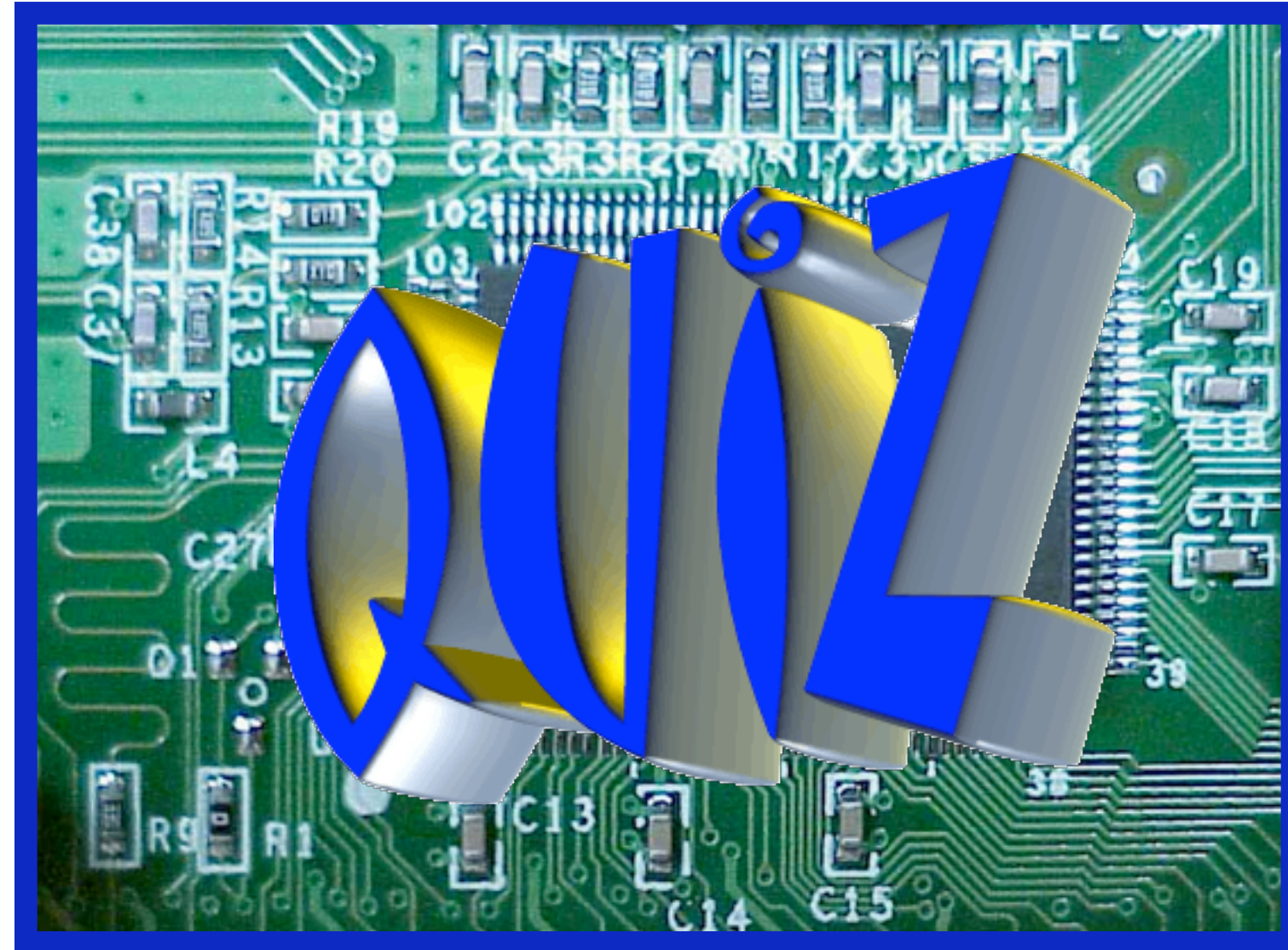
User-friendliness, motivating, visually attractive, built-in accessibility features, etc..

Interoperability, reusability

Technical independence and robustness, metadata schema and tagging procedures, conformance to standards



open nature ?



drill & practice	microworlds
behaviorist	socio-constructivist
fully automated	affordances
individual only	individual / collaborative
no human interaction needed	facilitates human interaction
closed set of predefined answers	open-ended answers

context free ?



“we haven’t resolved the tension between including context for effective instruction and excluding it to ensure maximum reuse of the object.”

From “Reusable Learning Objects- What does the future hold?”

By Peter Jacobsen, e-learning Magazine, November 1, 2002

<http://www.elearningmag.com/elearning/article/articleDetail.jsp?id=5043>

→→→LIFE-CYCLE? →→→



medium
life-cycle

e.g. semester

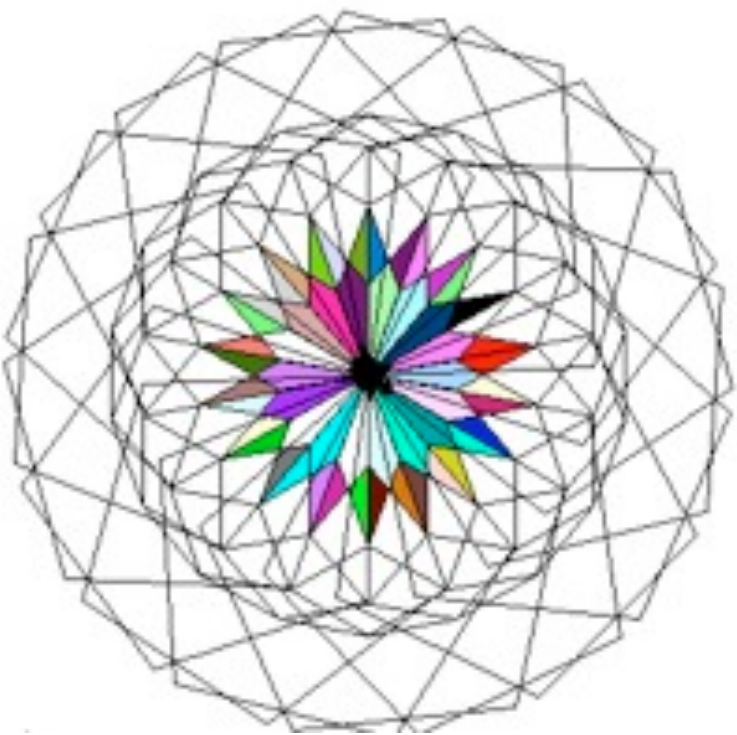
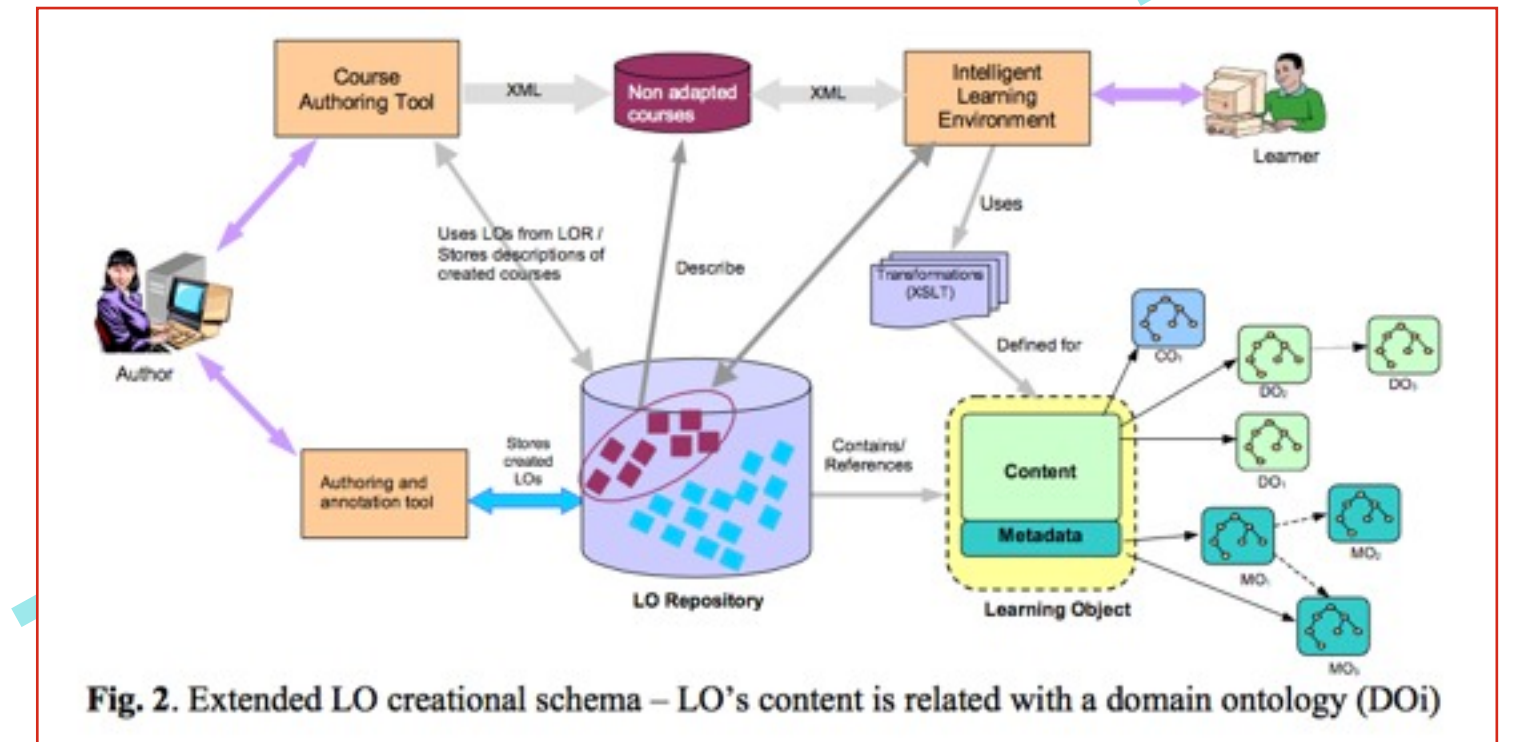
expensive

long
life-cycle

e.g. in line with
course or program
review cycle

short
life-cycle

e.g. class



Types of Repositories for Learning Resource

Private repositories

author bibliography and productions
students personal portfolio
course student production showcase

A few metadata, quality is in the usefulness of the repository to the participants

Community repository

a university department,
a community of practice
a research repository

larger effort/investment
higher degree of quality insurance,
needs a domain ontology
(specific classification and
relation between resources)

Public repository

totally open
(e.g. Creative commons)
limited access or repository

Protect the consumer
Protect the IP through CC or a digital
rights management (DRM) system.

manufacturing

storing
integrating



re-using
customizing
re-purposing

Learning
Objects

Hamdan Bin Mohammed e-University Case Study

<http://repository.hbmeu.ac.ae/lor/access/searching.do>

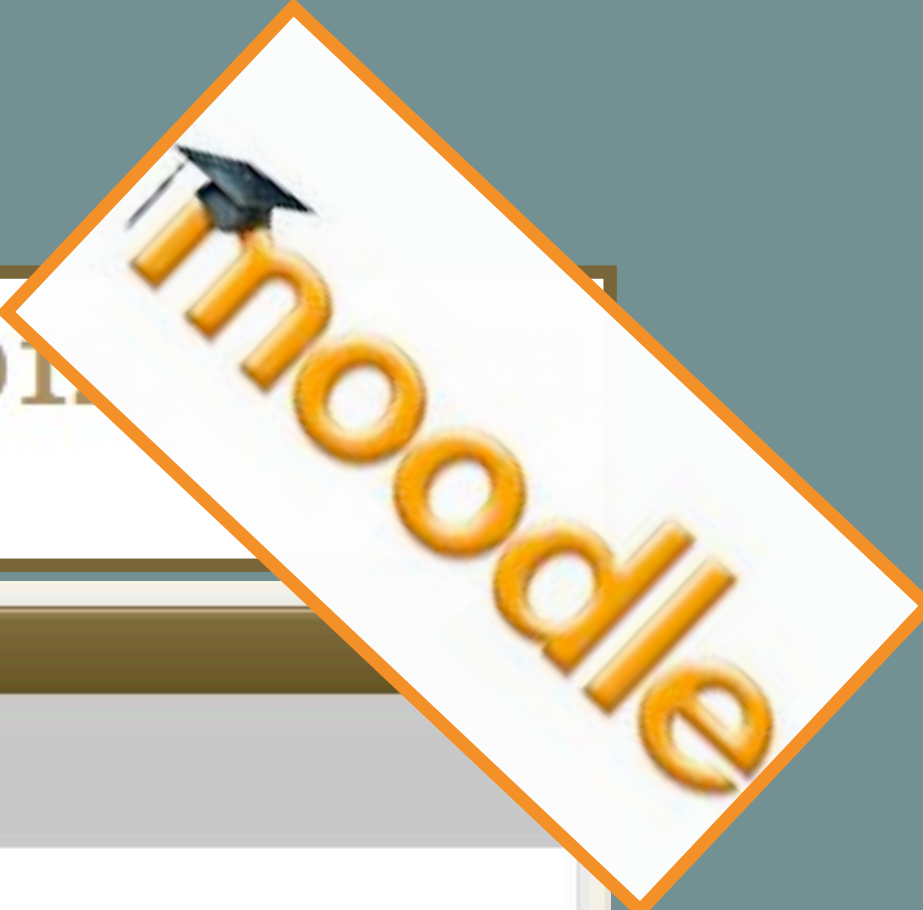


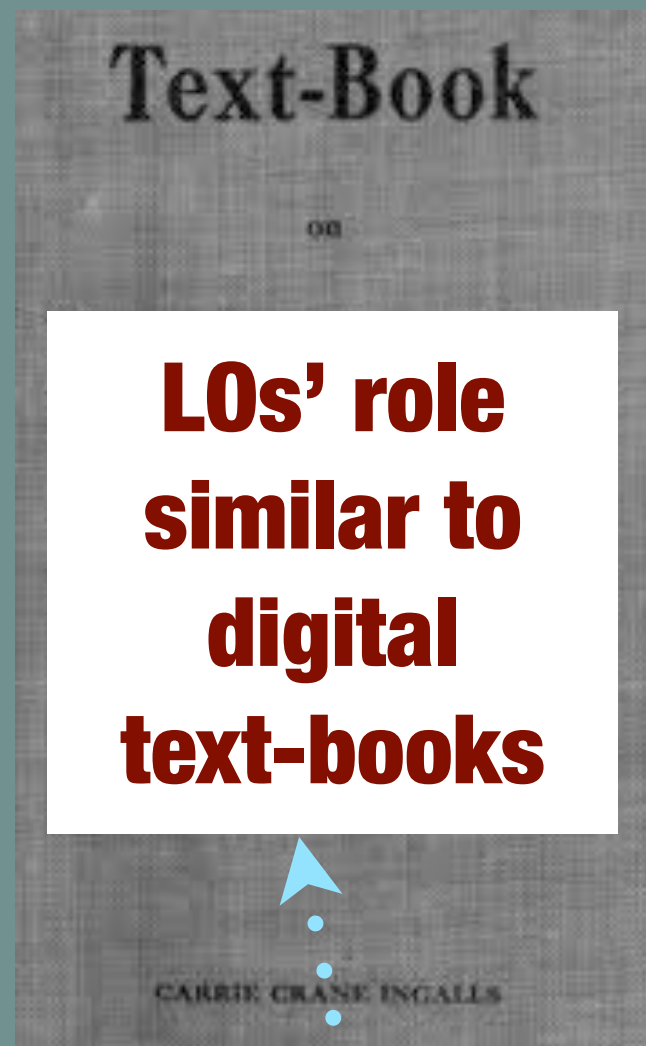
A screenshot of the EQUILLA search results page. The page has a blue header with the EQUILLA logo. Below the header, there is a search bar and a navigation menu with options like "Browse resources by format...", "School of e-Education", "e-School of Business & Quality Management", "e-School of Health & Environmental Studies", and "More...". The main content area shows search results for "Basics of Visual Communication". The result includes a description: "A short lecture about basics of visual communication that need to be embedded in the design of any multimedia artifact to ensure efficiency, ergonomics and users' comfort and maximum learning impact." It also shows metadata: "Status: Draft | Last updated: 10 days ago", "Tags: visual | communication", and "Date favoured: 14 days ago". There are also options for "0 comments" and "Remove from favourites".

“Learning objects are THE MAIN course material, not simply additional support for self-study.”



A screenshot of a Moodle course page. The course title is "Developing Multimedia Material (Spring 2011)". Below the title, it says "HBMeU ► 216DMM218". The page shows the course content for "Week 3 >> 26 February - 3 March". There are three items listed: "Week3 - Week4 Presentation" (with a PDF icon), "Principles of Visual Communication Design" (with a globe icon), and "Visual Communication and Multimedia Design" (with a PDF icon). The "Principles of Visual Communication Design" item is highlighted with a cyan oval.

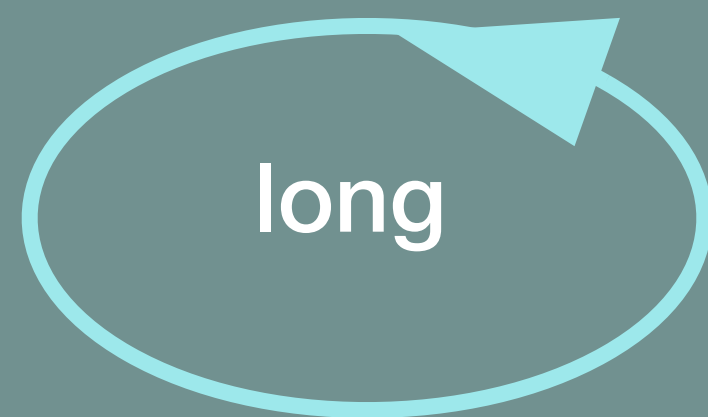




Reference documents semester-wise
[syllabus, timetable, outcome-
assessment maps, etc]

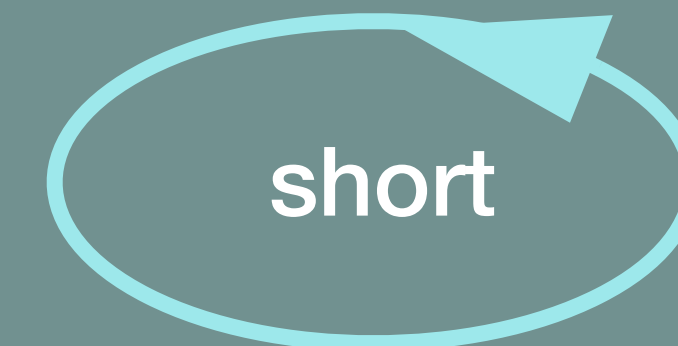
[Selected LOs +
User Generated Contents]

Context will be
embedded THERE



in line with
course/program
review cycle

LIFE-CYCLE



semester

interactivity



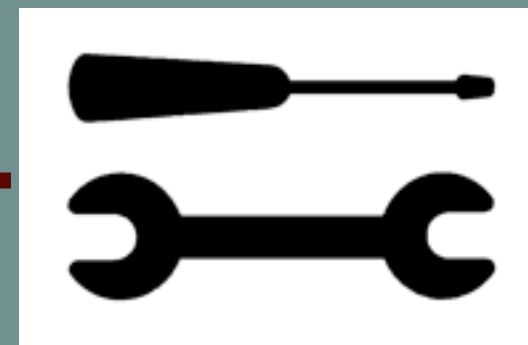
low level
close set of questions,
fully automated



high level
open-ended questions
human interaction

tools

Equella
search engines



discussion forums,
wikis, blogs, etc

LO1 - table of contents

RELATED COURSE LEARNING OUTCOMES

CO1. Demonstrate an effective understanding of the design and evaluation of multimedia technologies.

CO3. Evaluate a variety of multimedia technologies and tools.

1. Basic Principles of Visual Communication Design (lecture)

Prof Senteni (voice over PPT, 19 mn)

2. Quick analysis of a poster (activity)

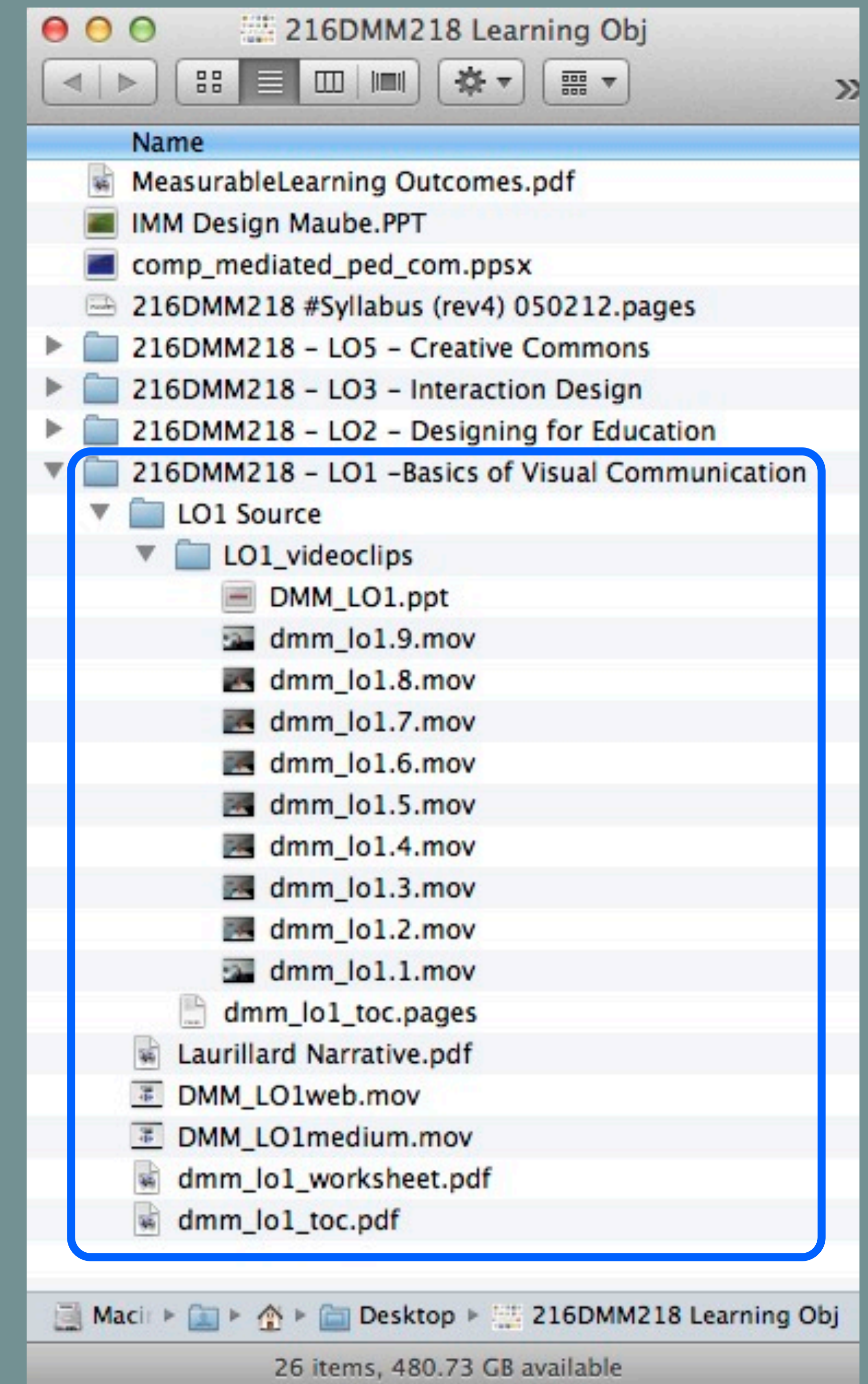
with regard to Calvino's dimensions (VMELQC), and learning dimensions (IMPC), using the provided visual analysis worksheet (dmm_lo1_worksheet)

3. Poster analysis (additional PPT on Slide Share)

http://www.slideshare.net/Jade_16/poster-analysis-2154048

4. Laurillard's Multimedia Narrative

Summarize and comment the article (Laurillard_Narrative)



LO1 - table of contents

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OERs

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OERs

Summarize and comment the article (Laurillard_Narrative)

OERs

Open Educational Resources (OER) are defined as “technology- enabled, open provision of educational resources for consultation, use and adaptation by a community of users for non-commercial purposes.”

- LO1_videoclips
 - DMM_LO1.ppt
 - dmm_lo1.9.mov
 - dmm_lo1.8.mov
 - dmm_lo1.7.mov
 - dmm_lo1.6.mov
 - dmm_lo1.5.mov
 - dmm_lo1.4.mov
 - dmm_lo1.3.mov
 - dmm_lo1.2.mov
 - dmm_lo1.1.mov

جامعة حمدان بن محمد
الإلكترونية
Hamdan Bin Mohammed
University

Contents

- Introduction
- Basic Principles of Visual Communication Design
- Video 2**
- Video 3
- Video 4
- Video 5
- Video 6
- Video 7
- Video 8
- Video 9
- Assessment

Video 2

the medium is the message

00:15 -01:48



thank you for your attention