Duration: 05/2009-04/2012 ECP 2008 EDU 418006





# Multi-type Content Repurposing and Sharing in Medical Education

### mEducator Scope

- Implement and critically evaluate existing standards and reference models in the field of e-learning in order to enable specialized state-of-the-art medical educational content to be discovered, retrieved, shared and re-used across European higher academic institutions.
- Medical educational content within: > traditional instructional teaching
- > to active learning and experiential teaching/studying
- Content types
- > from text to exam sheets
- Algorithms
- teaching files
- computer programs (simulators or games)
- > interactive objects (virtual patients, electronically traced anatomies)
- · Covers a variety of topics

## mEducator Objectives

- Identify and collect a critical mass of different educational material types
- Examine to what extend
  - existing standards for description of educational material can address all types of health educational material (eg. Helathcare LOM)
  - existing standards support the packaging and seamless delivery of all types of material (eg. SCORM for Healthcare)
- Examine possible extensions of existing ontological schemata, which describe the semantics of Learning Object s(e.g. s-LOM ontology)
- Provide recommendations for standards extensions
- Interact with standardization bodies to adopt recommendations (eg. MedBiquitous Europe, IEEE, IMS, CEN, Health On the Net, HL7)

#### mEducator Solutions

mEducator will seek best practice by comparing two solutions:

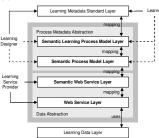
mEducator 2.0: Exchanging Content via "mash-up" technology and WEB2.0 tools for loosely coupled isolated **LCMSs** 



mEducator 3.0: Exchanging content via Semantic Web Services (SWS) technologies for federated LCMSs (Linked Data approach)

service oriented

derated architecture



- Both mEducator solutions are currently in their beta version.
- Solutions are being tested by the target user groups of the project (students, educators, health professionals) using scenario-based evaluation and expert reviews.

#### Current focus

- Finalization of the mEducator ontology and evaluation and final customizations on the two sharing solutions
- Provision of material to non-partners to enable content-sharing

# mEducator traditional and user-generated content

- √ Web2.0 based PBL/CBL
- ✓ MEDTING Clinical Cases
- ✓ Interactions with Virtual Patients
- √ Cases in the form of e-traces
- ✓ Interactions with serious games
- √Text Book
- ✓ PowerPoint Presentations
- √ Photos
- √ Videos
- ✓ Medical Research Articles
- √ Medical Algorithms
- ✓ Exam Sheet
- ✓ Self Evaluation Exams









## mEducator Clustering

- Clustering activities will focus on the following key areas:
  - Technical standards for Education
  - Multi-type content repurposing and enrichment
  - Intellectual property
- Social computing, Web2.0 technologies, Medicine/Health 2.0
- Semantic Web Services and Ontologies Web3.0 technologies, Medicine/Health 3.0
- Pedagogic strategies
- Thematic (Medical) areas
- Clustering with standardisation bodies
- Other EU Projects
- Other expressions of interest (interested parties should send an email to the Project Coordinator)

### **Partners**



#### Information:

Panagiotis D. Bamidis, Project Coordinator Lab of Medical Informatics, Medical School, Aristotle University of Thessaloniki, PO Box 323, 54124 Thessaloniki, GREECE Tel: +30-2310-999310, Fax: +30-2310-999263

E-mail: bamidis@med.auth.gr