



co-funded by the
European Commission
eContent*plus* programme



Experiences & Contemporary Challenges for Medical Education from the mEducator project

Panos Bamidis

Assist. Prof. Medical Informatics-
Medical Education

Medical School

Aristotle University of Thessaloniki
Greece



What is mEducator?

- A Best Practice Network (BPN) co-funded by the
 - **eContentplus 2008** programme of the European Commission, Information Society and Media Directorate-General, Digital Content & Cognitive Systems
- Start Date: May 1st , 2009
- Duration: 3 years
- Contract Reference: ECP-2008-EDU-418006
- As a BPN, it compares different solutions (2) to draw best practice recommendations



mEducator Partners

1	Aristotle University of Thessaloniki	GR	Coordinator, Technology provider, Content provider, User/Evaluation, Dissemination
2	University of Cyprus	CY	Technology Provider, Content provider, User/Evaluation, Dissemination
3	Democritus University of Thrace	GR	Content provider, Technology provider, User/Evaluation, Dissemination
4	MEDTING Medical Exchange Limited	IR	Content provider, Technology provider, Dissemination
5	Technical Univ. of Cluj-Napoca	RO	Technology provider, Pedagogical expert
6	Université Nice Sophia Antipolis	FR	Content provider, User
7	Medical University Plovdiv	BG	Pedagogical expert, Content provider, User
8	Università degli studi di Catania	IT	Pedagogical expert, Content provider, User/Evaluation
9	University of Helsinki	FI	Pedagogical expert, Evaluation
10	St George's Hospital Medical School	UK	Standardisation Body, Pedagogy Expert, Technology and Content Provider
11	Succubus Interactive	FR	Content and Technology Provider
12	The Open University	UK	Technology Provider
13	Coventry University	UK	Content provider, Technology provider
14	European Cervical Cancer Association	FR	User/Evaluation



How do people share nowadays

- Usually expose individual repositories (instead of allowing distributed searches)
- Case of search engines (e.g. Google):
 - data are restricted to specific kinds of documents (such as HTML, PDF...
i.e. do not harvest metadata as such)
- Minimal sharing mechanisms...
- Minimal interoperability between systems...
- Peer collaboration ?



mEducator central idea

- discover, retrieve, use, rate, re-use and ***re-purpose*** educational content *irrespective* of any **L**earning **M**anagement **S**ystem use
- providers and users of such content may be
 - expert instructors (academics / health professionals)
 - students / learners



Ultimate goal...

- provide mechanisms for content publishing, discovery, & retrieval
- analyze policies and mechanisms for content evaluation, rating, renewal and repurposing
- elaborate on intellectual property rights for educational material
- test the impact of true interoperability, repurposing, enrichment, and embedding of a variety of highly attractive and up-to-date learning resources in each of the partners' curricula
- provide recommendations on how to implement interoperable educational content discovery and retrieval networks

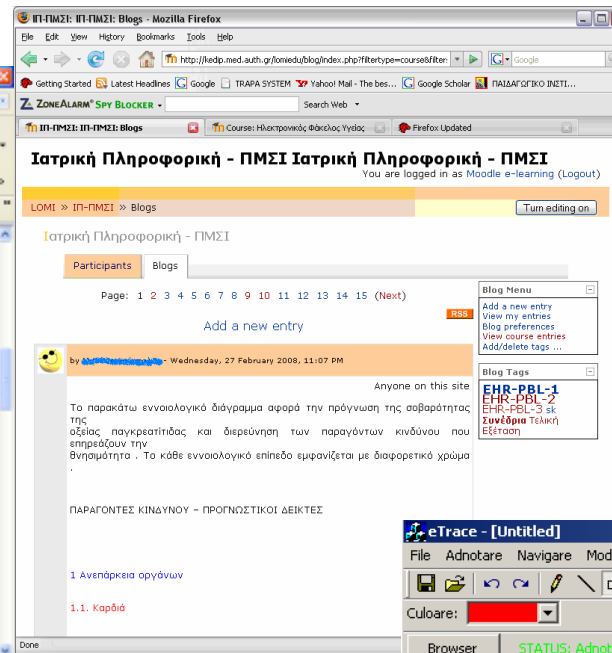
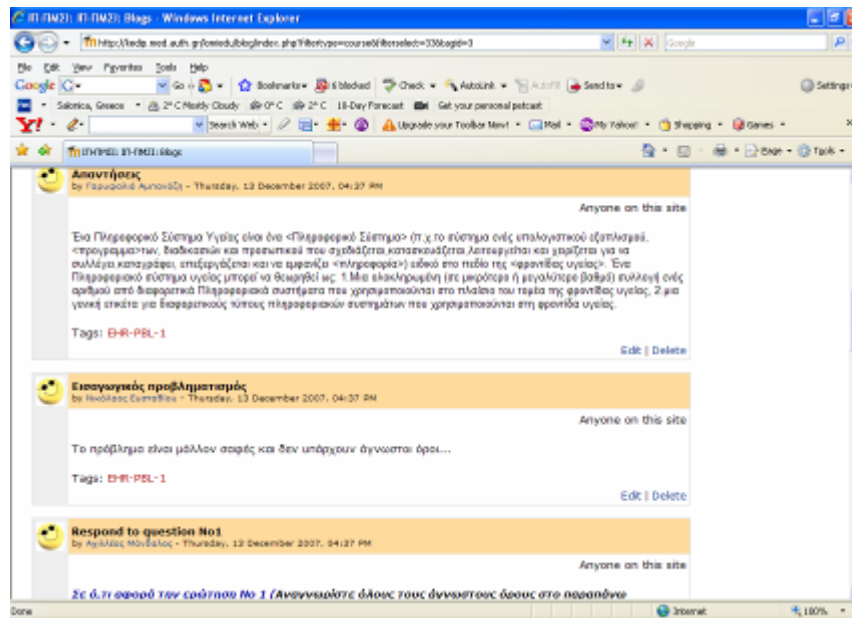


mEducator “content”

refers to any type of educational material with a registered history of creation and evolution

- Is linked with
 - specific educational goals and objectives
 - learning outcomes
 - educational contexts/settings
- comes recommended with
 - certain types of teaching methods & strategies
 - and/or assessment

Class Discussion Forums

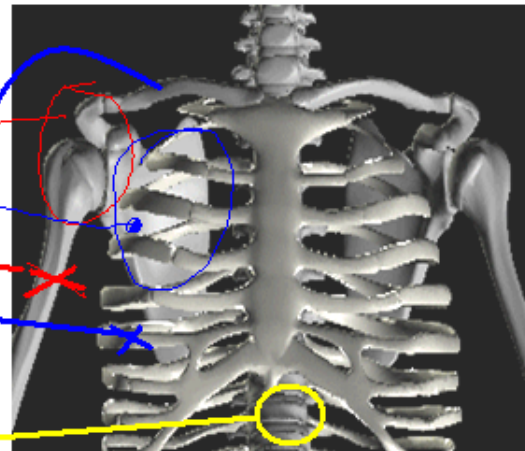


Personal Blogs

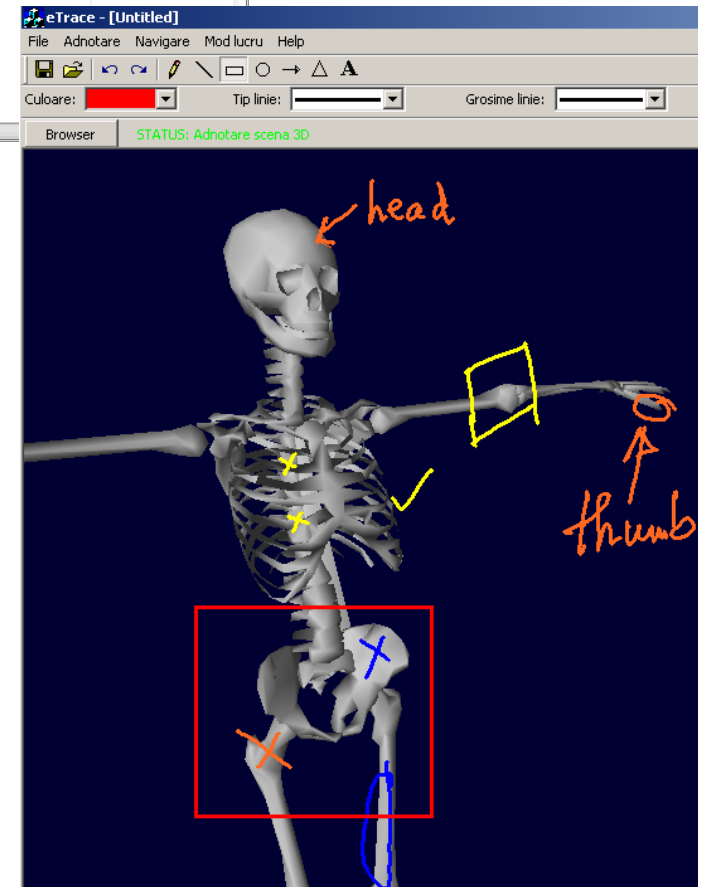
eTrace – Graphics annotation based lessons

Please specify on the next skeleton the following bones:

- ✓ shoulder
- ✓ scapula
- both ✓ humerus
- ✓ rib
- ?! ✓ femur
- clavicle
- vertebrae



attend after the next assessment
6 (six) pts.



MedicalExchange
MEDTING +

Medding for Enterprises

That's Medding Enterprise Partnership

it's free

- Medical Meeting and Exchange: Publish and Share Medical content.
- Worldwide Research and Collaboration Platform: Design your private e-learning and Telemedicine network.
- Create Clinical Cases, upload images, videos and Transfer everything from your own Web.
- Private label MEDTING for your university, hospital or Medical Office.
- You have 2049 cases to read and 77030 images & videos to see

Start using MEDTING >

Images from Atlas

Emphasis Case

Secondary habitual patellar dislocation

Keywords: habitual dislocation of the patellofemoral joint. Transfer of patellar tendon. Patellar maltracking

Description: This case illustrates a 27-year-old woman who underwent thirteen years ago a realignment surgery for recurrent patellar dislocation in her left knee. She cost.

★ ★ ★ ★ ★

Votes: 18 Views: 885 Comments: 3

OpenLabyrinth

Continue with questions or examine?

Would you prefer to continue asking more questions or to move on with to the clinical examination?

You are afraid of losing time and you move forward to...

Case Information

Case: Chest pain English version (865)
ID: 26775
Score: 101

Restart Case

Case Pathway

Review your pathway

Case Score

MC (155)
I (36)
SpQ2 (36)

Generated MEDTING | Enterprises Partnership

Votes: 27 Views: 556 Games: 1

★ ★ ★ ★ ★

clinical cases

Video viewer

Health Leaders

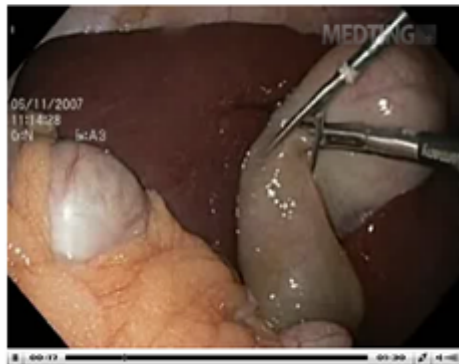
Interesting comments on generic health topics

Carcinoma of oesophagus

August 25th, 2008 by mcg

This is a sample post with an embeded video coming from MDPDXX.

This can be very useful for doctors that want to have MDPDXX content into their blogs.



Posted in cancer | Edit | No Comments >

Categories

Select Category

Recent Posts

Carcinoma of oesophagus
Presentación de Caso Clínico
Caso Clínico GESFOR de la Semana
Mordedura de Piraña
About the 3rd annual World Health Tourism Congress

Recent Comments

Mr_Keyword_Suggestion on FSMB Web tool examines pharmaceutical marketing practices
About the 3rd annual World Health Tourism Congress // Health 2.0 News Portal on About the 3rd annual World Health Tourism Congress
mcg on Something is moving in medical tourism...

Health2.info

Descubren la relación entre la tensión alta y los niveles altos de ácido úrico
El jefe de Prevención de Murcia formará parte del Grupo Asesor Europeo en Vacunaciones
Sanidad retira cinco lotes de leche infantil
La familia de Neira pide que declaren más médicos
Los pacientes sin seguro no tienen garantizado el acceso a la salud en EE.UU.
Los científicos descubren que la leptina también ayuda a los diabéticos tipo 1
Los medicamentos ayurvédicos vendidos por internet contienen metales tóxicos
Candidiasis albicans crónica, una afección difícil de erradicar
Nueva técnica para revertir las secuelas de un ictus
La vocalización ultrasónica inusual en ratones podría explicar el autismo

The climate health impact game

Lives Saved: 0 Lives Lost: 0 Population: 2,402,230,000 Funds: 0

Current Status: Life Saver Time Left: 14:43

Help Research

Currently Researching

Empty Empty

key: Research Cost Earning Potential Rate of Spread

Disease Stats

Disease Spread Rate

Disease Unknown

Disease Unknown

Disease Unknown

Disease Unknown

Disease Unknown

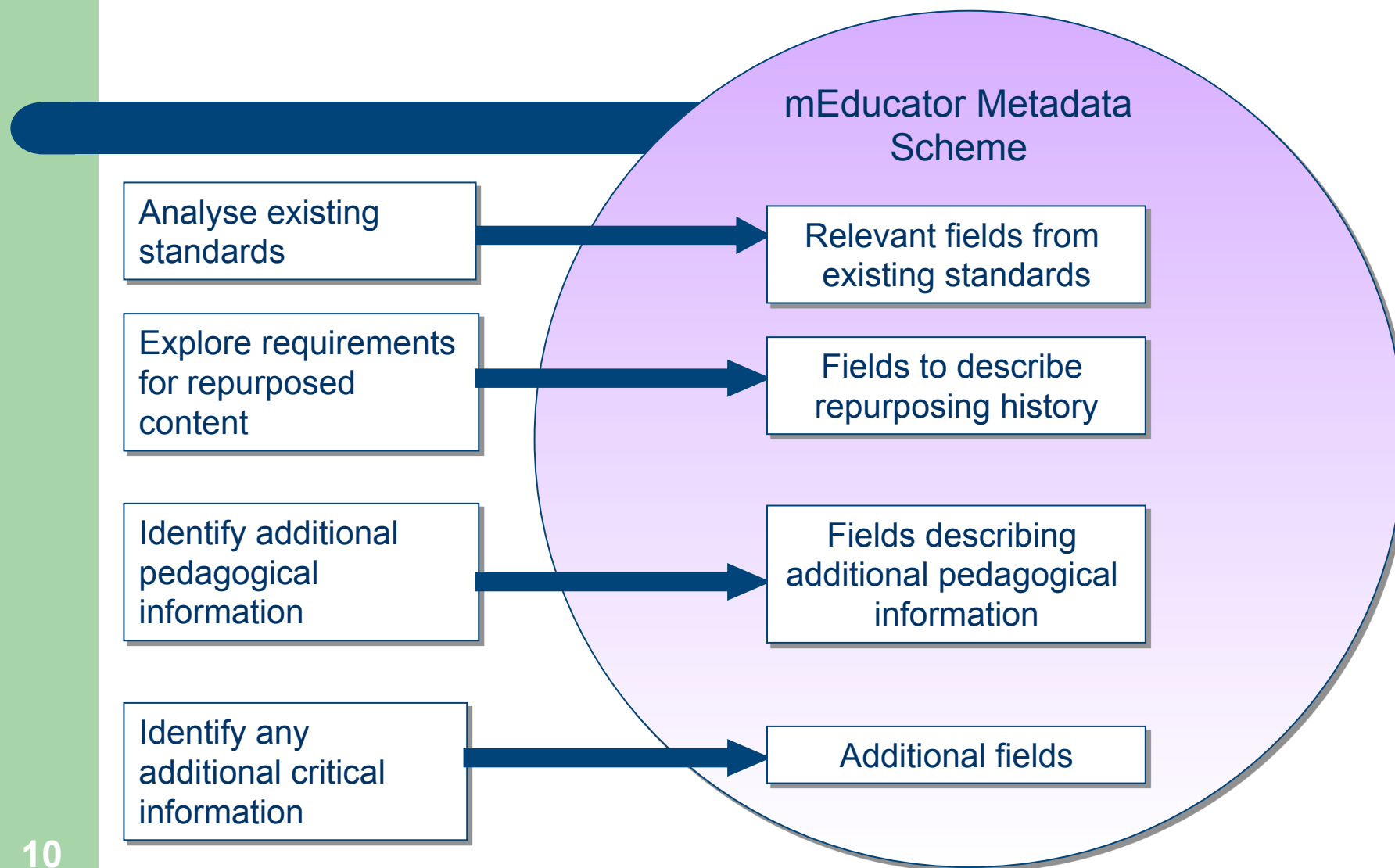
2002 2025

Serious Games



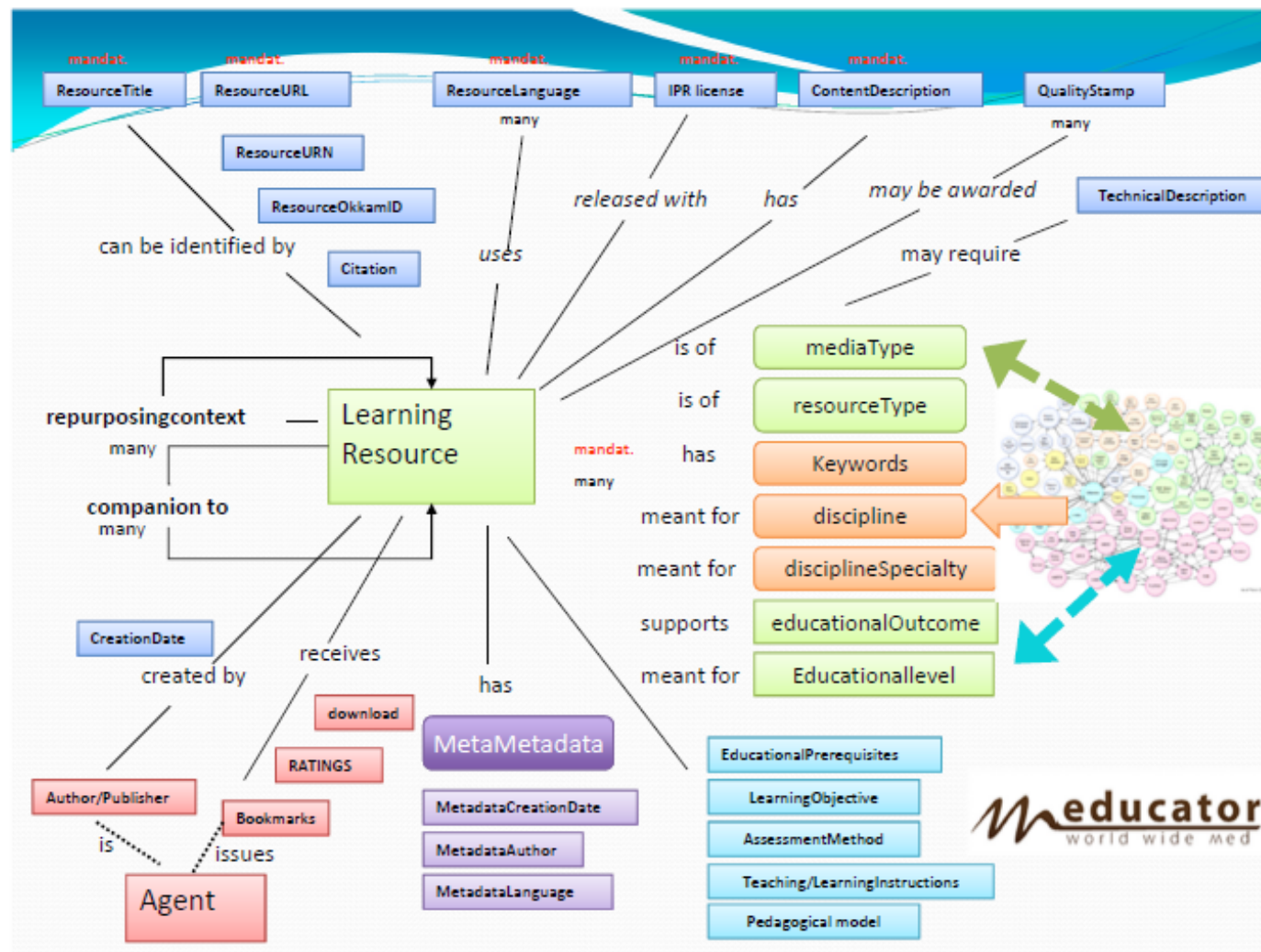


Metadata Scheme Overview





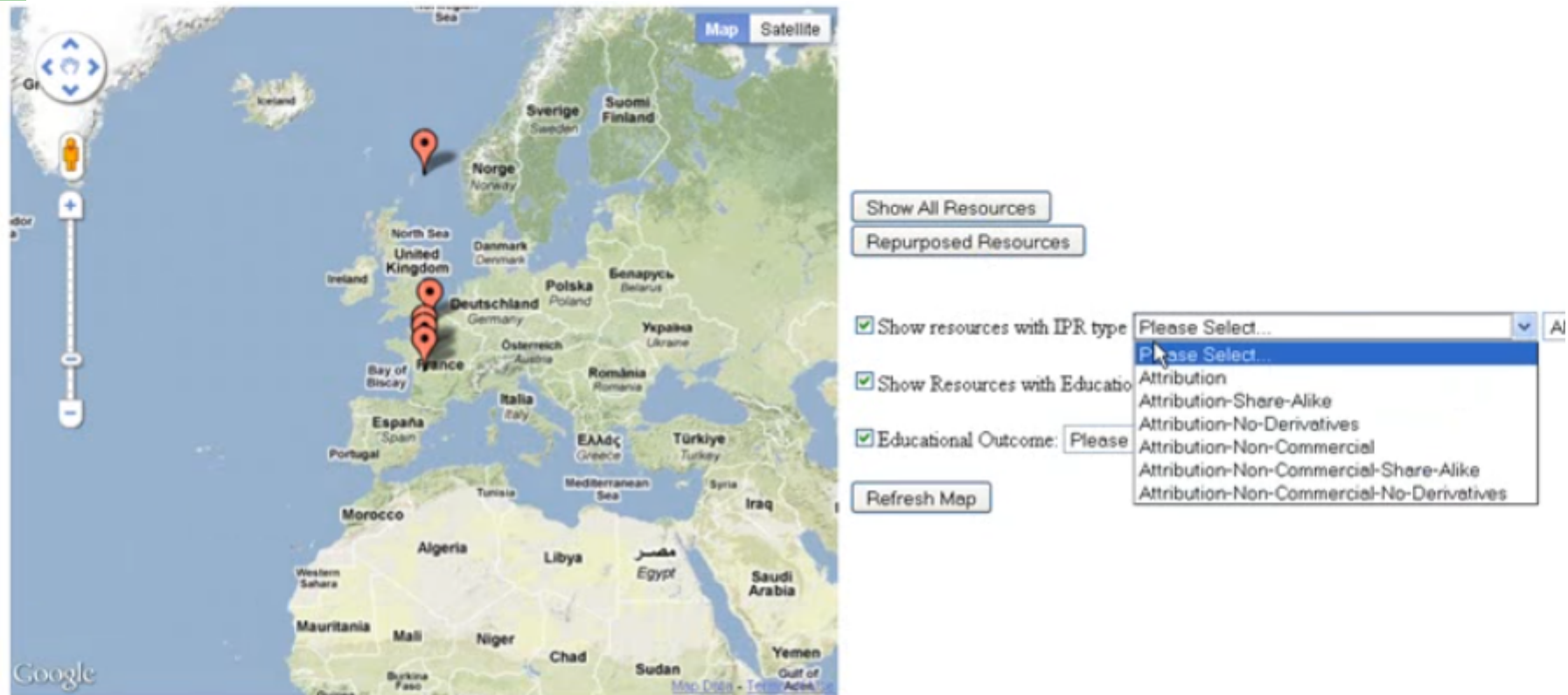
The mEducator Learning Resource Space



- Giordano et al, Developing controlled vocabularies for educational resources sharing: a case study,
- Mistopoulou et al, Connecting medical educational resources to the Linked Data cloud: the mEducator RDF Schema, store & API; both in Proc. of 1st Int. Workshop on eLearning Approaches for the Linked Data Age (Linked Learning 2011, in ESWC2011)



Google-Mapping histories of a resource



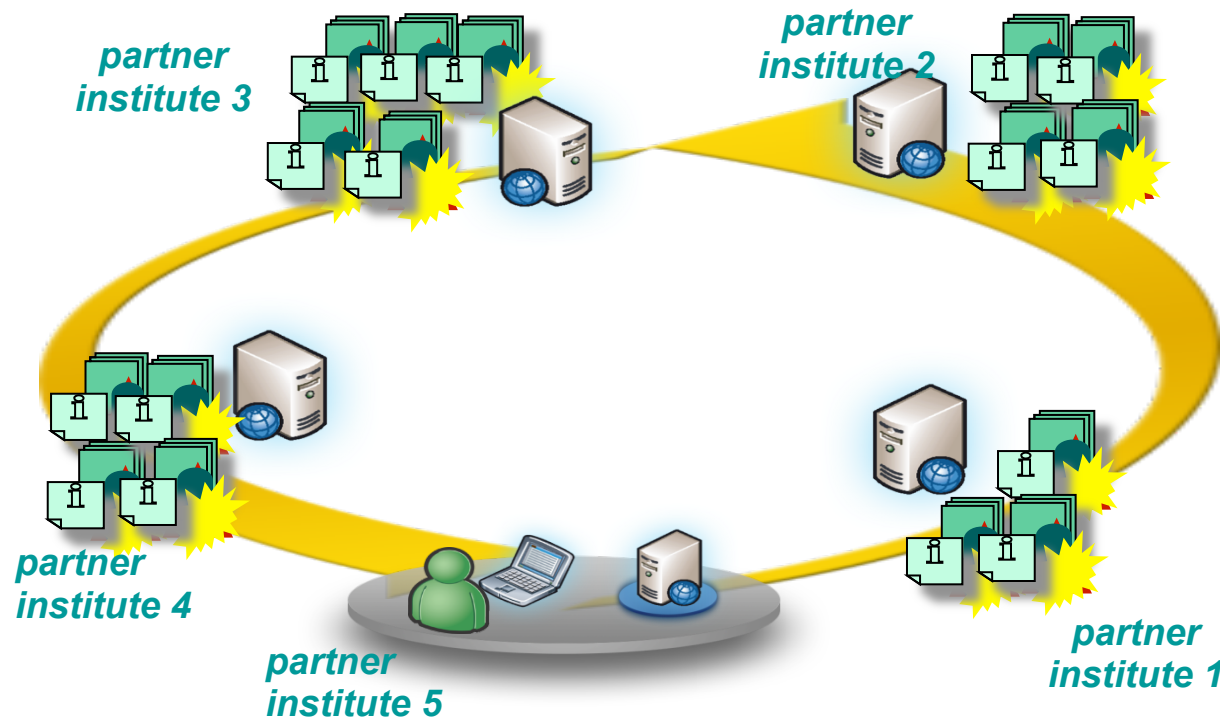
Konstantinidis et al, "Geotagged Repurposed Educational Content through mEducator Social Network to Enhance Biomedical Engineering Education", In Proceedings of 12th MEDITERRANEAN CONFERENCE ON MEDICAL AND BIOLOGICAL ENGINEERING AND COMPUTING, MEDICON 2010, Springer-Verlag, 2010.





mEducator is testing 2 different approaches for sharing

1. **mEducator 2.0**: loosely coupled LCMSs via mashup technologies (**Web2.0**)
2. **mEducator 3.0**: LCMSs linked via (semantic) linked services (**Web3.0**)

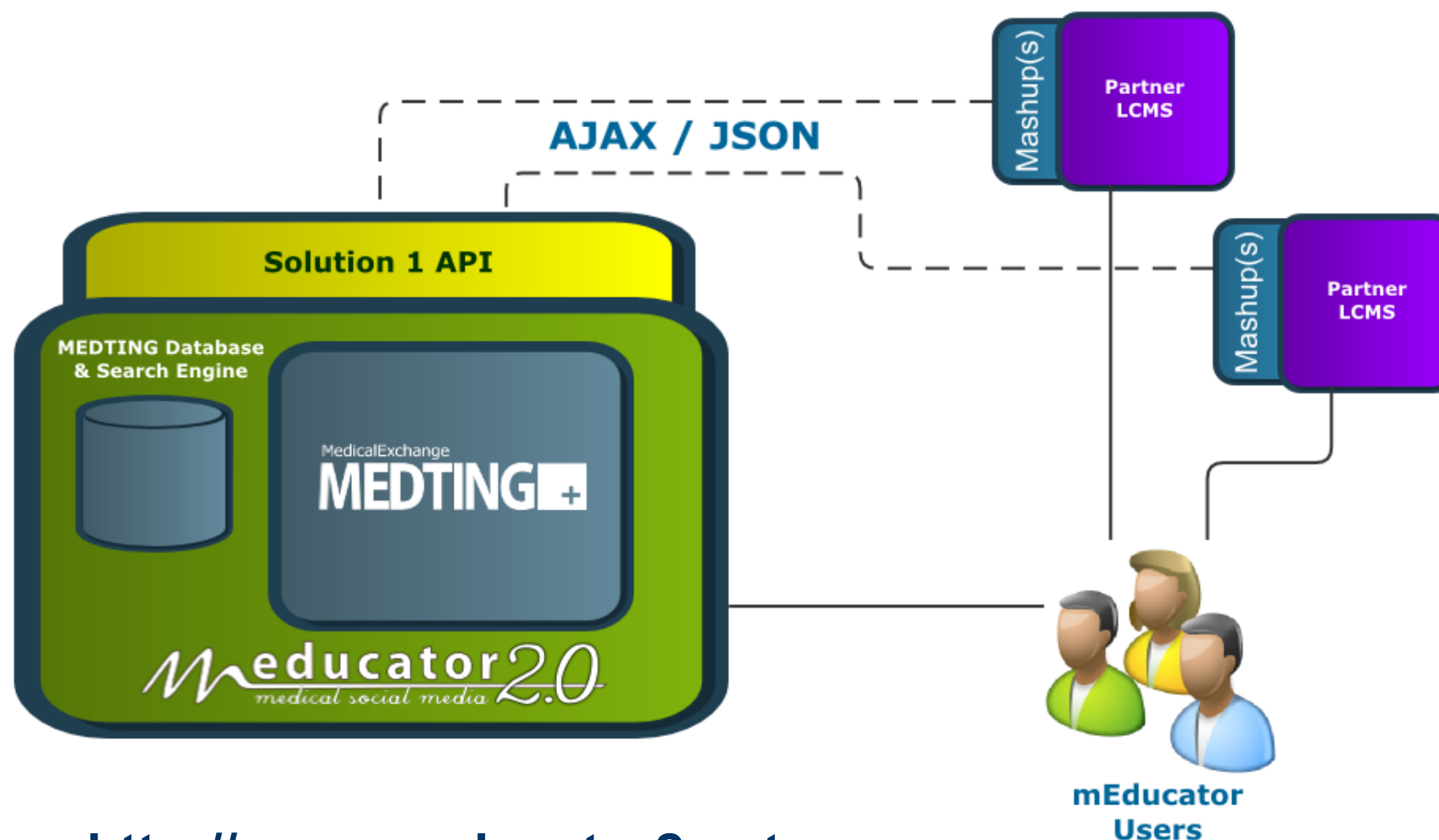




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mEducator 2.0 Overview



<http://www.meducator2.net>



Example: moodle at AUTH and its mEducator 2.0 mashup

Auth - mEducator

You are not logged in. ([Login](#))
English (en)

Login

Username
Password
[Login](#)
[Create new account](#)
[Lost password?](#)

Το ηλεκτρονικό περιβάλλον εκπαίδευσης της Ιατρικής σχολής του Α.Π.Θ. έχει βασιστεί πάνω στην έρευνα των Προγραμμάτων:

- [CrossBorderHealth](#) - INTERREG IIIA Greece - Bulgaria (Decision 300531/YD4388 01/11/2005), το οποίο συγχρηματοδοτήθηκε από την Ευρωπαϊκή Ένωση και το Ελληνικό κράτος.
- [IntraMEDnet](#) - INTERREG IIIA/ARCHIMED (Contract Number A.1.087), το οποίο συγχρηματοδοτήθηκε από την Ευρωπαϊκή Ένωση και το Ελληνικό κράτος.
- [WideMEDnet](#) - INTERREG IIIB ARCHIMED το οποίο συγχρηματοδοτήθηκε από την Ευρωπαϊκή Ένωση και το Ελληνικό κράτος.
- [mEducator](#) - eContentPlus ICT PSP.

Course categories

- [Miscellaneous](#)
- [Test2](#)
- [AUTH Test Resources](#)
- [test 1](#)
- [Μαθηματικές & Προγραμματιστικές Τεχνικές Ανάπτυξης & Σχεδίασης Πληροφορικών Συστημάτων \(ΜΠΤΑΣΠΣ\)](#)
- [Εκπαίδευση Εκπαιδευτών - Hands on training](#)

Search courses: [Go](#)

Calendar

April 2011

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

Search mEducator Repository - Solution 2

[Go](#)
[Advanced search](#)

Sign in:

Username
Password
[Log In](#)
[Forgot your password?](#)

[Register here](#)

You are not logged in. ([Login](#))

moodle

Who's Online

Alvaro Salva
Christina Lakka

Latest Blog Posts

test
test
2011-06-30 12:26:57 Alvaro !

Test Blog 27-06-2011

Quick Menu

- New learning resource
- New blog post
- New group

Who's Online

Alvaro Salva
Christina Lakka

Latest Blog P

test
test
2011-06-30 12:26:57

Test Blog 27-06-2011

It's just a test. Thank you for leaving a...
2011-06-27 13:55:25

Test Blog Post

testing this functionality..
2011-06-22 17:56:03 Evangelia Mi

mEducator Special Event ~...

I would like to invite...
2011-05-12 15:46:08 Stathis Koni

Quick Menu

- New Learning Resource
- New blog post

Quick Menu

- New learning resource
- New blog post
- New group

Who's Online

Alvaro Salva
Christina Lakka

Latest Blog Posts

test
test
2011-06-30 12:26:57 Alvaro Salva

Test Blog 27-06-2011

It's just a test. Thank you for leaving a...
2011-06-27 13:55:25 Antoine Mistretta

Test Blog Post

testing this functionality..
2011-06-22 17:56:03 Evangelia Mitsopoulou

mEducator Special Event ~...

I would like to invite...
2011-05-12 15:46:08 Stathis Konstantinidis

Learning Resources

MY LEARNING RESOURCES

MEDTING Stats

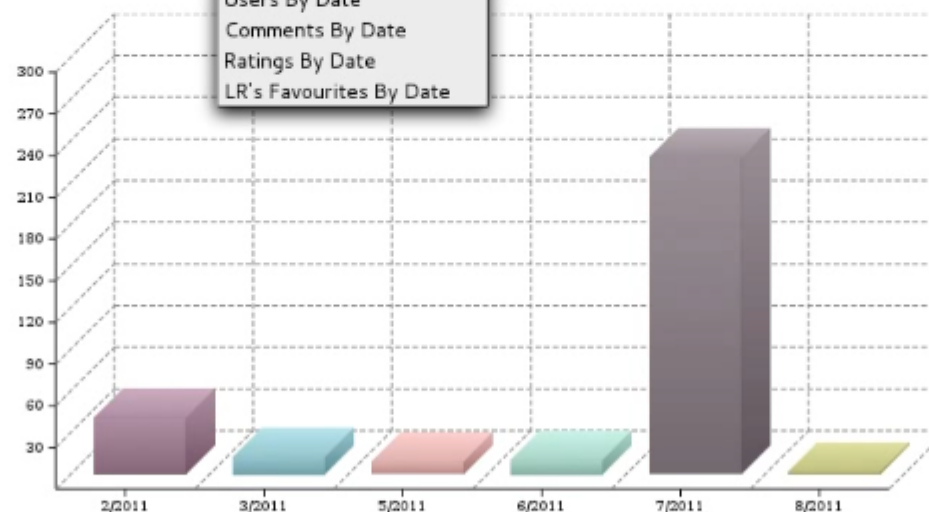
Type:

- LR's By Date
- Select One
- LR's By Date
- Repurposings By Date
- Groups By Date
- LR's in Group By Date
- Users By Date
- Comments By Date
- Ratings By Date
- LR's Favourites By Date

Range of:

From:

To:

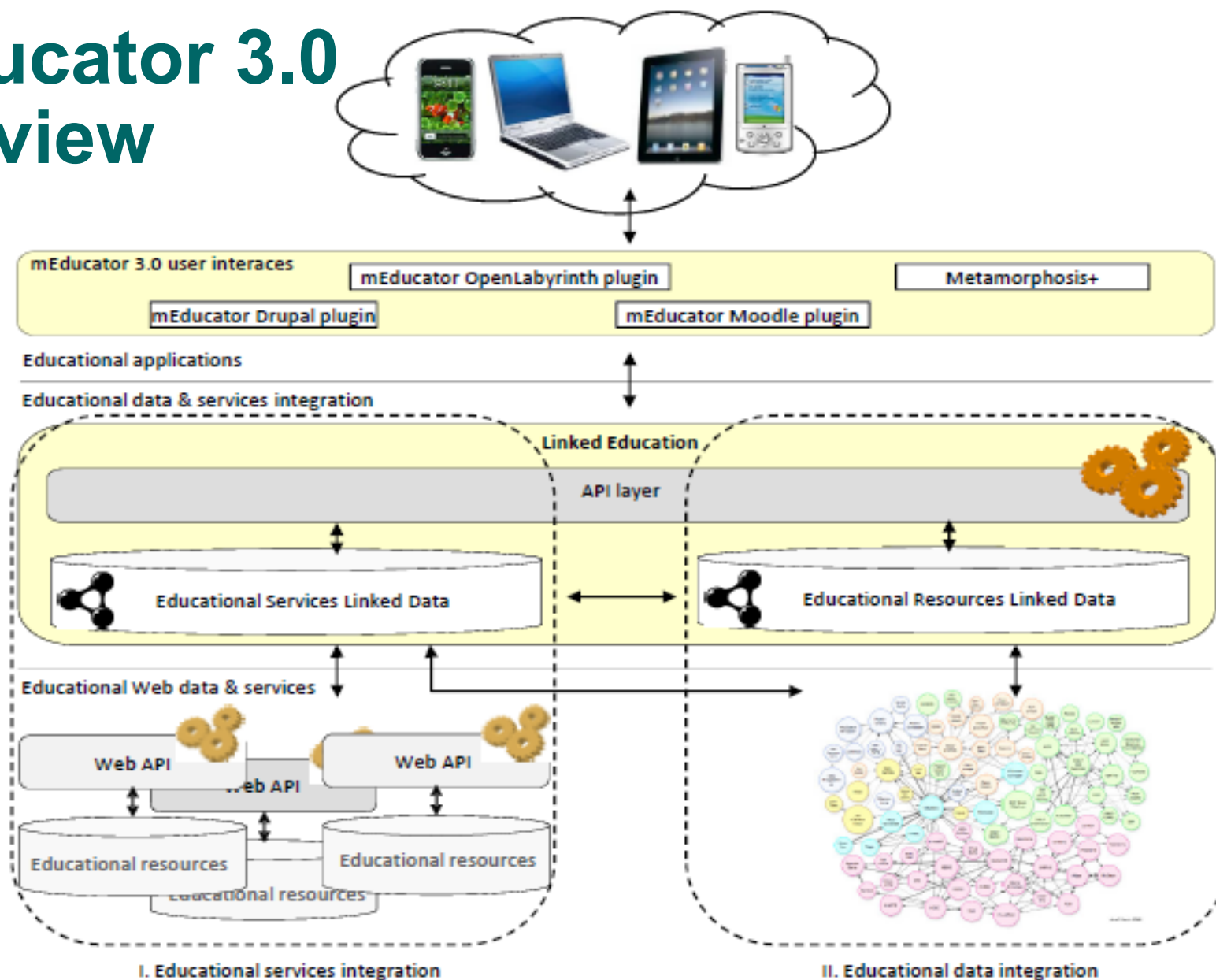


LR's By Date

Range of: Months




mEducator 3.0 Overview





http://www.meducator3.net

*Open Linked Education*

MOODLE DRUPAL OPEN LABYRINTH METAMOPRHOSIS

MOODLE

The Moodle module has been developed to allow resources to be created, uploaded, described, shared and searched across moodle users. It exploits SPARQL queries using a D2R server with the associated RDF responses complying with mEducator's RDF schema. The D2R server is a tool for publishing relational databases on the Semantic Web. It enables RDF and HTML browsers to navigate the content of the database, and allows applications to query the database using the SPARQL query language.

- [Read more](#)
- [Download](#)
- [Visit portal](#)

DRUPAL

The Drupal installation profile has been developed to allow resources to be created, uploaded, described, shared and searched. It exploits SPARQL queries using Drupal SPARQL endpoint functionality. Multiple endpoints (included internal and external) could be added in SPARQL registry and queried.

- [Read more](#)
- [Download](#)
- [Visit portal](#)

OPEN LABYRINTH

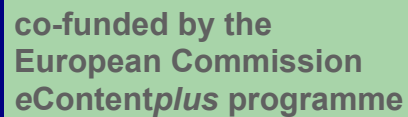
The Open labyrinth module has been developed to allow specific resources (virtual patients, OSCE) to be described, shared and searched. It exploits SPARQL queries using a D2R server with the associated RDF responses complying with mEducator's RDF schema.

- [Read more](#)
- [Download](#)
- [Visit portal](#)

METAMORPHOSIS+

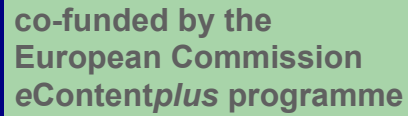
The mEducator 3.0 interface based on elgg, is used as one possible user interface to the general architecture of mEducator 3.0, showcasing the suitability of the Linked Services/Linked Data-based approach. As an interface, it extends the metamorphosis environment developed in the early phase of the project as a testbed for the metadata description scheme and content sharing mechanism, which serves also as a social network spanning two different dimensions: of humans (social) and of educational resources (objects linking and inheritance).

- [Read more](#)
- [Visit portal](#)



mEducator 3.0 moodle

19



Learning package

[Add a file](#) | [Add a weblink](#)

Basic details [title to be changed]

☐ Enable multiple items

Title* ?

Identifier* ?

[Can I Apply an IPR license to my resource?](#)
[Help me select a Creative Common license](#)

IPRType* ?

[Title to be changed]

If the resource is protected by any other IPR licence please state which one

Quality ?

Language

Metadata Language



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Local and Global specialised searches

Search results from all the
repositories that contribute to
mEducator project

Find - Google Chrome
kedip.med.auth.gr/meducator/mod/resource/type/pneumoteg

Repository » Find | (Deploy all) » 'test'

AUTH - mEducator mEducator

Πνευμονική εμβολή. Αιμοπαθγένεια, κλινική εικόνα, αντιμετώπιση. (Choose) (Preview) (Draft) (Restricted) Pneumoniki emvoli
X /mEducator/ - test5

Πνευμονική εμβολή (Choose) (Preview) Pnevmoniki emvoli
X /mEducator/ - test6

test4 (Choose) (Preview) Embolism
X /mEducator/test4 - test4

21



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eContentplus programme



mEducator 3.0 Drupal

The screenshot displays the mEducator 3.0 Drupal interface. At the top, there is a navigation bar with links: Tasks, Index, Dashboard, Content, Structure, Appearance, People, Modules, Configuration, SPARQL settings, Reports, and Help. The user is logged in as Dimitris Spachos, with a 'Log out' link. The main content area is titled 'Home » Add content'. On the left, there is a sidebar with 'Default shortcuts' (Add content, Find content) and a 'User menu' (My account, Log out). The 'Add content' link is circled in red, and a red arrow points from it to the 'Create Article' form on the right. The 'Create Article' form includes fields for 'Title' and 'Body (Edit summary)'. Below the body field, there is a 'Text format' dropdown set to 'Filtered HTML' and a list of allowed HTML tags. There is also a 'Tags' field and an 'Image' upload section. At the bottom, there is a 'Revision information' section with links for 'Comment settings', 'URL path settings', 'Authoring information', and 'Publishing options'. The footer of the page says 'Powered by Drupal'.

Home Users

Home » Add content

Default shortcuts

- Add content
- Find content

User menu

- My account
- Log out

Add content

- [Article](#)
Use *articles* for time-sensitive content like news, press releases or blog posts.
- [Basic page](#)
Use *basic pages* for your static content, such as an 'About us' page.
- [Resource Metadata Description](#)
mEducator resource metadata description content type
- [User](#)
User content type

Create Article

Title *

Body ([Edit summary](#))

Text format: Filtered HTML [More information about text formats](#)

- Web page addresses and e-mail addresses turn into links automatically.
- Allowed HTML tags: <a> <cite> <blockquote> <code> <dl> <dt> <dd>

- Lines and paragraphs break automatically.

Tags

Enter a comma-separated list of words to describe your content.

Image

[Choose File](#) No file chosen [Upload](#)

Upload an image to go with this article.
Files must be less than 12 MB.
Allowed file types: png gif jpg jpeg.

Resource

Revision information

No revision

[Comment settings](#)
Closed

[URL path settings](#)
Automatic alias

[Authoring information](#)
By Dimitris Spachos

[Publishing options](#)
Published

☐ Create new revision

Revision log message

Provide an explanation of the changes you are making. This will help other authors understand your motivations.

[Save](#) [Preview](#)



mEducator 3.0 Metamorphosis+



Edit profile

educational resource ▾

General Description **Classification** Educational Repurposing Vocabularies Companion

Media Type

selection ▾

e-Book remove
Interactive LearningEnvironment remove

or provide a different Media Type. ⓘ

CUSTOM MEDIA TYPE1

Select the type(s) of the Educational Resource from the following dropdown list

selection ▾

Table remove
Clinical record with annotations remove

or provide a different Educational Resource Type. ⓘ

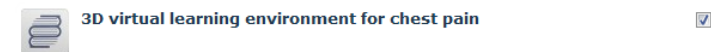
CUSTOM RESOURCE TYPE 1

Educational level for which the resource is intended ⓘ

selection ▾

Save

Search Results



1

Find additional results by clicking the checkbox of the items above you are most interested in

Possibly related resources

Global similarity Tags Uses Replinks

First order associations


	Medical Learning Course	<div></div>
	Chest pain virtual patient	<div></div>
	Differential diagnosis of chest pain	<div></div>



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meducator
world wide med

mEducator 3.0 Openlabyrinth


**OpenLabyrinth**

OpenLabyrinth is an open source educational pathway authoring and delivery system

preview

editor

- global
- nodes
- node grid
- sections
- links
- counters
- counter grid
- questions
- files
- users
- avatars
- elements
- clusters
- feedback
- sessions
- visual editor

 v2.6.1

add Labyrinth ""

title

description

contributors [add]

registered Labyrinth authors:

keywords

Labyrinth type

Game - scores, 1 startpoint, 1 or more endpoints

Labyrinth Skin

select

timing off ☒ : timing on ☐

timing

time delta (seconds)

section browsing dont show ☒ | visible ☐ | navigable ☐

mEducator Metadata Entry

ISSN

Identifier

+

IPRTYPE (Select...)

If the Labyrinth is protected by another licence please state which one

Quality

+

Language

+

Metadata Language

Creator

+

Institution

password

username



Special thanks to all mEducator partners!

Aristotle University of Thessaloniki

University of Cyprus

Democritus University of Thrace

MEDTING Medical Exchange Limited

Technical Univ. of Cluj-Napoca

Université Nice Sophia Antipolis

Medical University Plovdiv

Università degli studi di Catania

University of Helsinki

St George's Hospital Medical School

Succubus Interactive

The Open University

Coventry University

European Cervical Cancer Association



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eContentplus programme



Associate Partnership Application

and Sharing in Medical Education

MAIN ABOUT MEETINGS PARTNERS DELIVERABLES PUBLICATIONS NEWS CONTACTS REGISTER WIKI HELP

LANGUAGE
English Italiano Français Ελληνικά България Română

The site is in beta version

USER LOGIN

Username: *

Password: *

LOG IN

» Create new account
» Request new password

WHO'S ONLINE

There are currently 0 users and 0 guests online.

POLL


Which mEducator logo do you like the best?:

☐ Logo 1
☐ Logo 2
☐ Logo 3
☐ Logo 4
☐ Logo 5
☐ Logo 6
☐ Logo 7
☐ Logo 8
☐ ~

Welcome to mEducator

The mEducator Best Practice Network (BPN) aims to 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.

[Find out more...](#)



Screenshot from the mEducator kick-off meeting in Thessaloniki in May 2009

LATEST NEWS & ARTICLES

1. mEducator on Twitter
2. Let's choose our logo!
3. Upcoming Third Party Events
4. mEducator workshop at ITAB
5. Collaborative Educational Networks: Supporting Free Movement of Knowledge

Project presentation

Click here

NEWSLETTER

Stay informed on our latest news!

Email: *

or.net/?q=user/register

Only members of the mEducator consortium can create an account!

If you are not a member but you'd like to follow up mEducator progress you will be accepted as authenticated users.

Daily Email News Notifications

☒ Receive email notifications of news posted to this site. Notifications are sent every 1 day.
By accepting to receive *daily email news notifications*, you will be kept informed of news associated with mEducator.

Personal information

Comments:


The content of this field is kept private and will not be shown publicly.

CREATE NEW ACCOUNT

This project is funded under the eContentplus programme, a multiannual Community programme to make digital content in Europe more accessible, usable and exploitable. The mEducator consortium members are solely responsible for the contents of this web site. It does not represent the opinion of the European Community and the Community is not responsible for any use that might be made of information contained herein.

Disclaimer

Drupal



eContentplus

Register and join the *mEducator* community
<http://www.meducator.net>



Invitation to Sloop2desc partners: Participate in testing mEducator solutions!

- 1st International Spring School on “Medical Education Content Sharing Technologies”, 4-5 April 2012, Thessaloniki, Greece
- 1st International Conference on “Medical Education Informatics”, 6-7 April, 2012, Thessaloniki, Greece
- Challenge: upload resources and get free Registration & Accommodation for both events!
- Email: info@meducator.net; subject: spring school