

A Semantically Linked Virtual Community for Sharing Educational Resources in Biological Sciences

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learning content in life sciences

- produced by a variety of sources:
 - basic research outcome
 - accepted scientific knowledge
 - research infrastructures & clinical practice
- addresses a variety of learning approaches, e.g.
 - conventional teaching
 - active learning experiences:
case/problem/role/inquiry/... based learning
 - ...

educational content types

- conventional content
 - lecture notes, books, exam questions, practicals, scientific papers, graphs, images, videos, ...
- content types unique in life science education
 - atlases, biological databases, teaching files, virtual patients, evidence based medicine forms, ...
- alternative educational content types
 - reflecting active learning techniques and new technologies: didactic problems, wikis, forums, web traces, ...
- user generated content
 - reflecting user interaction with learning content

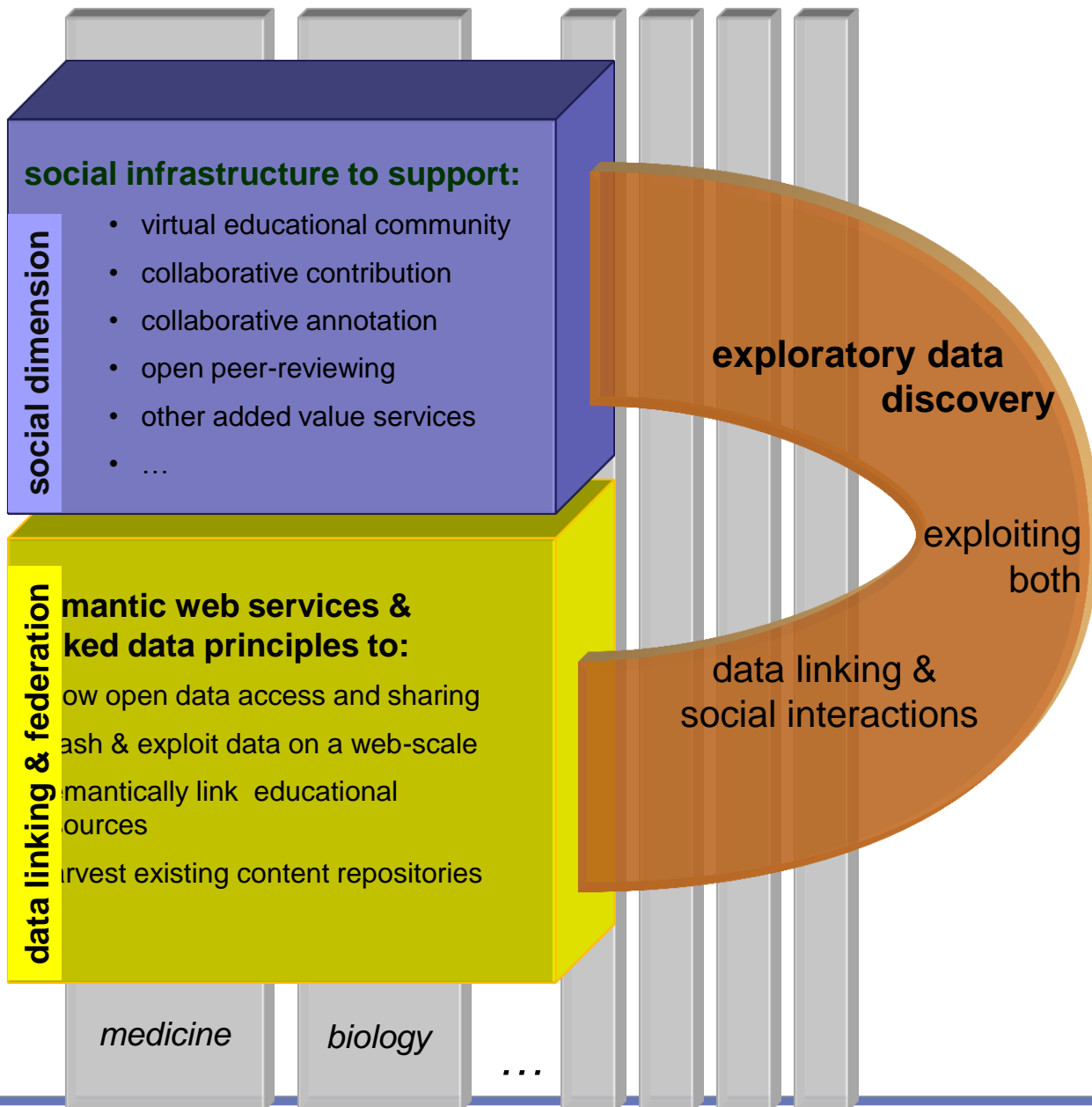
content repurposing and reuse

considering the state-of-the-art nature of life-sciences educational content, and the coverall cost to create it, it is imperative that such content can be:

- enriched
- repurposed
- re-used

so as to be embedded effectively in life sciences curricula, continuing life-long education and public awareness

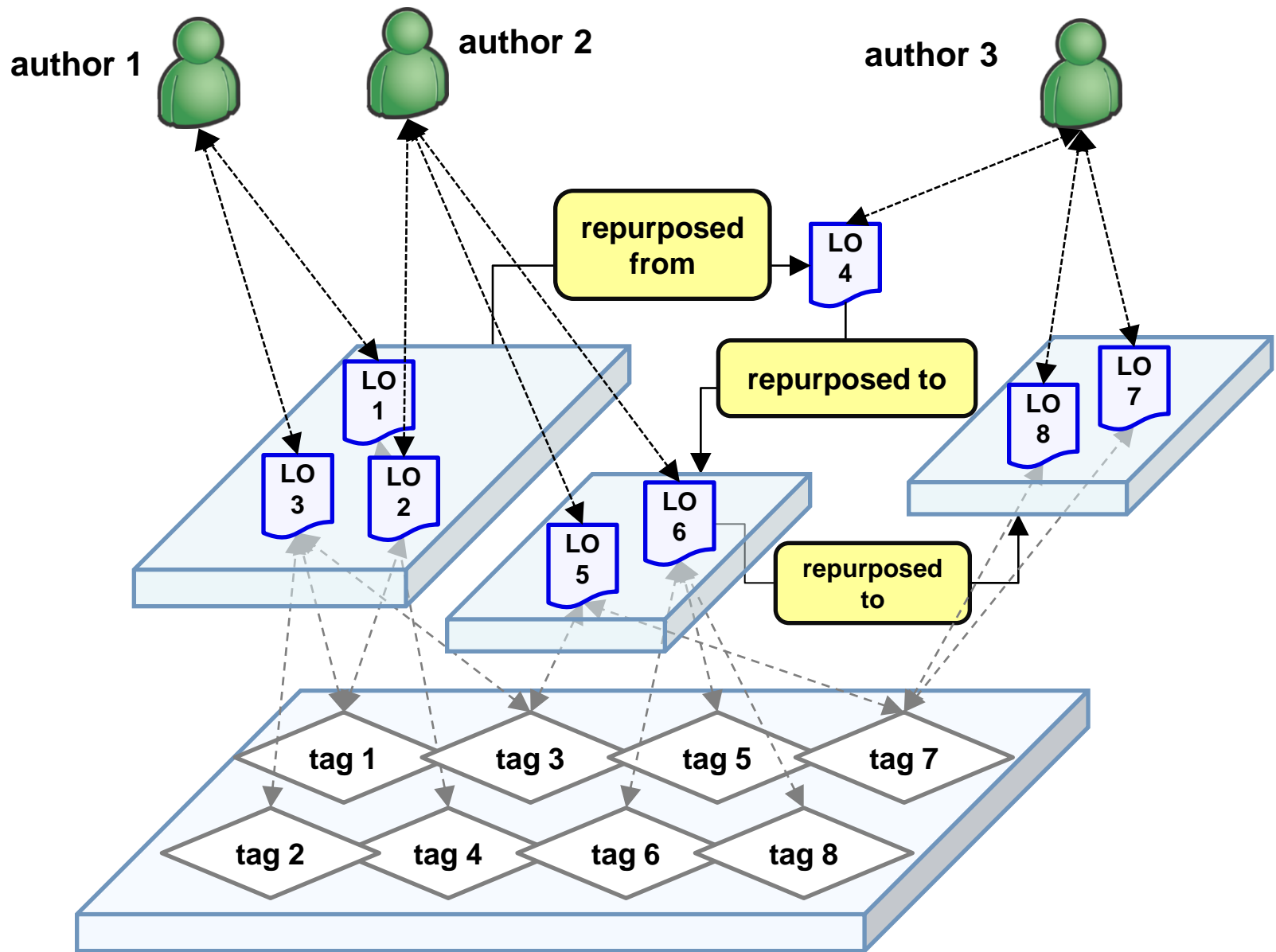




social networking of educational content

two distinctive and interacting social networks

- **network of persons:**
 - authors
 - potential authors
 - perspective users of learning objects (e.g. students, teachers, education managers, etc)
- **network of published learning objects:**
 - profile including a variety of tags that describe the object and re-purposing



semantic web aka web 3.0

- semantic annotation of metadata using RDF
- converting data into entities on the Web creating a graph with data for nodes and properties for edges
- establishing a global naming scheme with URIs and Ontologies



Open Linked Data

- Sir Tim Burners Lee : “The semantic web done right”
- not just linking pages but the actual data
- data from various sources that share common semantics via URIs

interactivity for humans

- declaration of “friends”
- personal blogs
- personal content libraries
- creation of groups
- private and group messaging
- ...

social dimension for content items

- via (author defined) tags
- via comments and blogging
- via repurposing history

use the

“I am a friend of” and “my friend is”

relationships of a social network to describe

“repurposed from” and “repurposed to”

- via collections based on semantic annotation

the implementation

- based on the ELGG open source social network platform modified for the incorporation of the second network of learning objects
- semantified metadata using RDFa and SPARQL endpoint for triples

<http://metamorphosis.med.duth.gr>




MetaMorphosis - Windows Internet Explorer



http://metamorphosis.med.duth.gr/


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MetaMorphosis


metamorphosis | a social environment to share educational resources in health sciences

[Register](#) | [Lost password](#)

 Video Tutorial
 Introductory Presentation



Username
 Password
 Remember me


ANNOUNCEMENTS

Welcome to MetaMorphosis

30 Latest Resources


There are currently 259 Educational Resources (44 repurposed)

1-10 11-20 21-30 [View all](#)


[Vaccination against HPV and cervical cancer brochure for Russia](#)
 Created by: [Philip Davies](#) (23 days ago)

This resource contains text and illustrations presenting a summary of a) the risk of cervical cancer, b) the role of the HPV in cervical carcinogenesis, c) the mechanism of action of the HPV vaccines, d) the role of the HPV vaccines in reducing the risk of cervical cancer and e) the recommendations for the use of the HPV vaccines in Russia. It is intended to support healthcare providers in the region to educate their patients about cervical cancer screening.





Language: Russian
Keywords: Вакцинация, ВПЧ, рака шейки


[Follow up of an abnormal Pap smear brochure for Russia](#)
 Created by: [Philip Davies](#) (23 days ago)

This resource contains text and illustrations presenting a summary of a)

Latest Users

There are currently 65 registered users

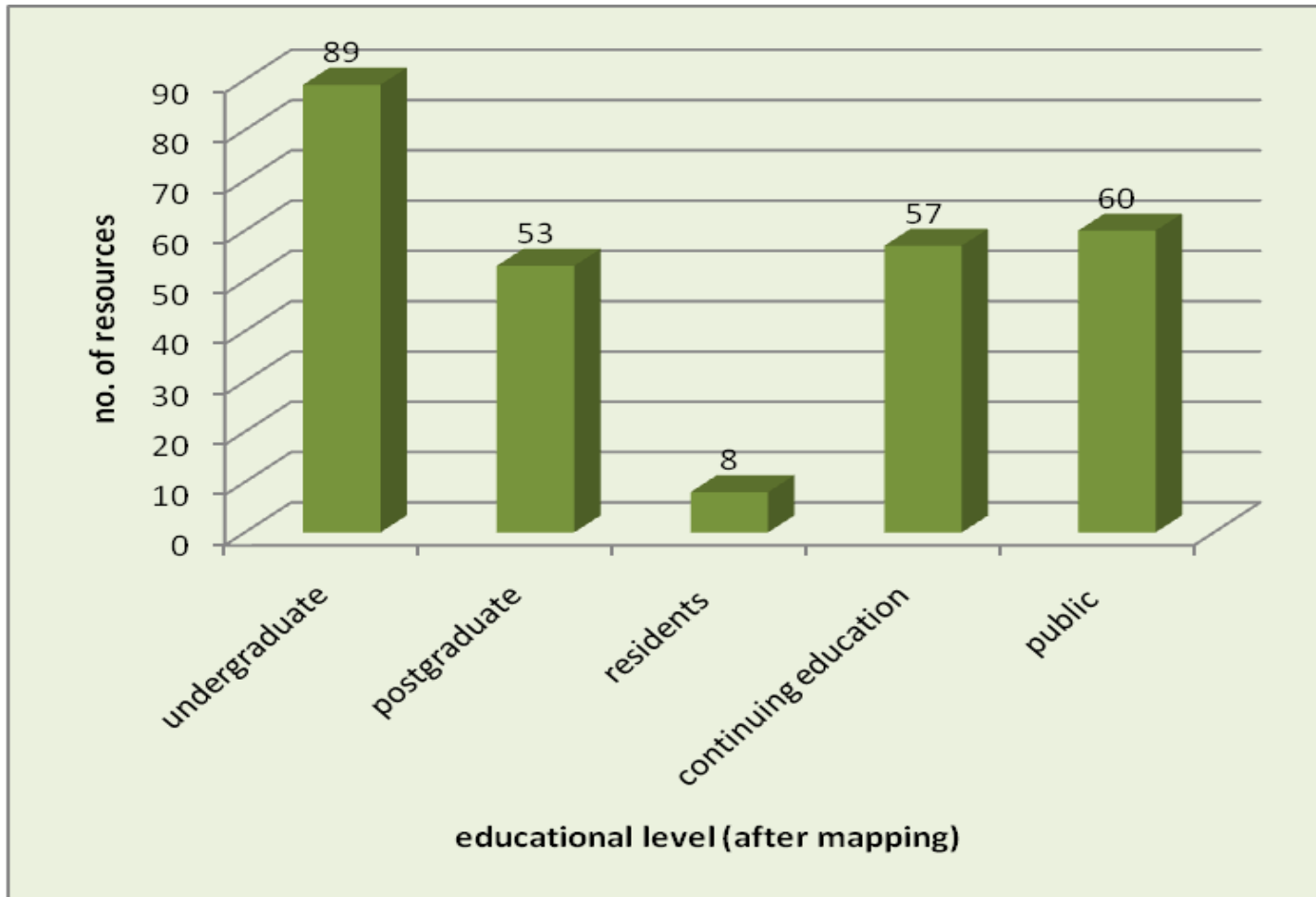
 [Christina Lakka](#)
 [George](#)
 [Marios Neofytou](#)
 [Philip Davies](#)

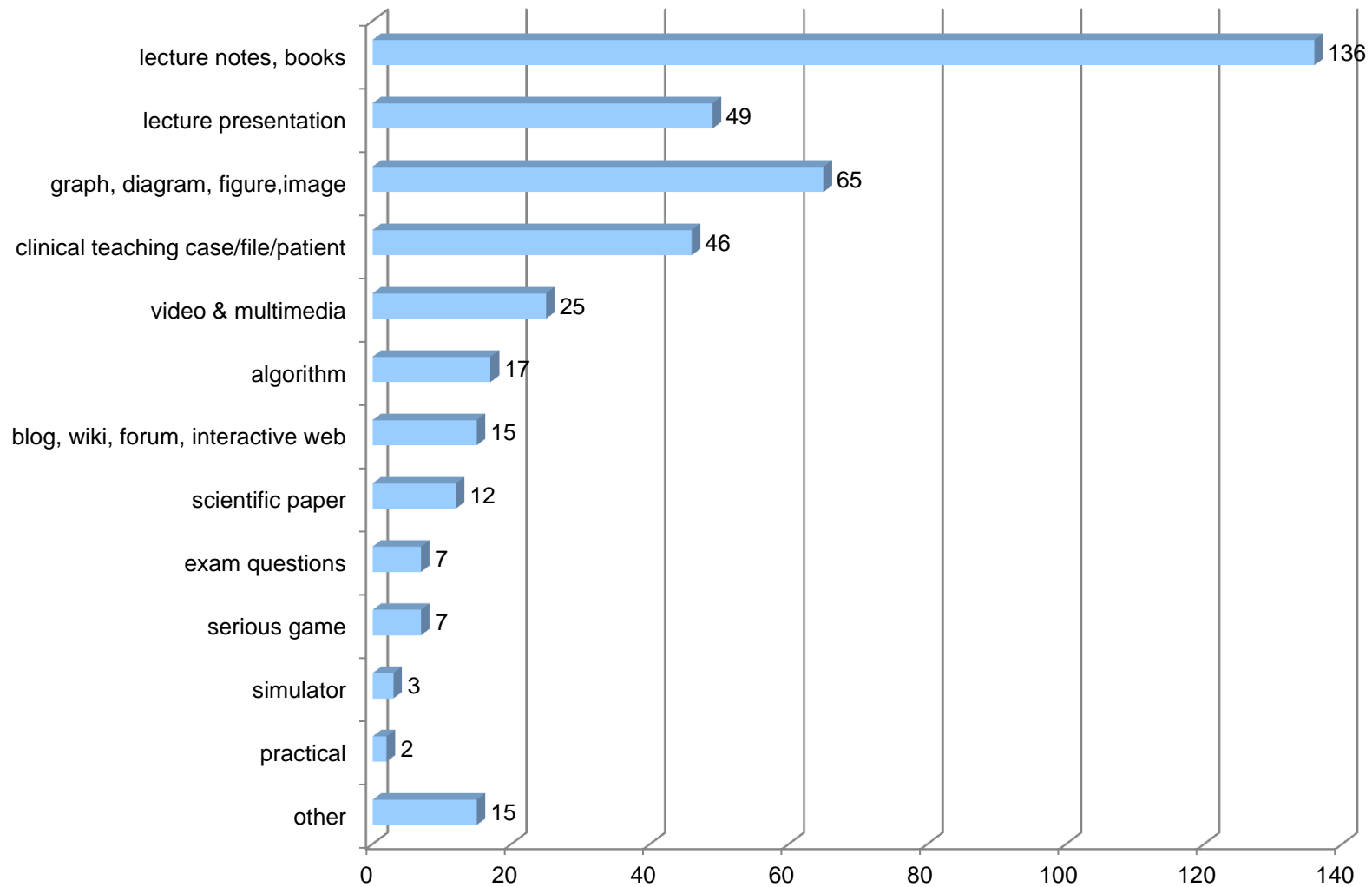
Done Internet | Protected Mode: On 100%

latest statistics

- over 300 educational resources
- 60+ repurposed
- 70+ registered users







work done within mEducator

project title: mEducator: Multi-type Content Repurposing and Sharing in Medical Education

project type: Best Practice Network

programme: eContentplus
Information Society & Media Directorate
General, European Commission

contract: ECP 2008 EDU 418006

duration: 2009-2012

consortium: 14 partners from 9 EU countries, lead by AUTH (GR)

budget: ~4.500.000 €

website: <http://www.meducator.net/>



cite as

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