



“EU-EECA R&I collaboration in the field of
Information and Communication Technologies”

PROPOSAL IDEA

Baku

12 November 2014



Idea: Overview

Idea title:

Ubiquitous Learning through Mutual Interactions by “Science Gateway” Portal of Multi-level Courses, Flipped Classrooms, and Virtual Labs

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Idea: Description

Related Objective: Develop an innovative set of tools (methods + algorithms + platforms united by “Science Gateway” portal) to foster greater connection between formal, non-formal and informal learning and remove obstacles for ubiquitous learning

Short Description: Development of multi-level approach (from macro- to microlearning methods/algorithms) and a large scale pilot (in real settings) for:

- direct involvement in real-life learning situations (in industry, business, science, art, etc.) on many levels by “virtual labs”
- going from one-way lectures to “flipped classrooms” to foster creativity and teamwork (2nd generation of MOOCs)
- effective learning through social engagement (like in online gaming, where knowledge is got by mutual interactions)

Excellence and Impact

Beyond the state-of-the-art our approach allows to provide:

- **innovative technology-enhanced learning tools** (adaptive learning, affective learning, game-based learning, virtual environments/labs, etc.) for direct involvement in real-life learning situations
- **multi-level building blocks** of a digital ecosystem for ubiquitous learning (including formal and informal learning)
- **portal platform** (like gUSE by MTA SZTAKI, Hungary) for development and integration of robust and fit-for-purpose **technology-enhanced tools for personal and targeted learning** on many levels (from macro- to microlearning)

The impact of our proposal in the European/Int'l context will be as follows:

- **boost the market for and innovation** in educational technologies
- **address the needs of the learning communities** in better use of educational cloud solutions, mobile technology, learning analytics and big data
- **facilitate** the creation of **the more effective personalized learning materials** and **new ways to learn** them online (behind MOOCs like FutureLearn, edX, Coursera, ...)

Type of collaboration sought & Contact Info

- We are searching for consortium in “ICT 20 – 2015 call: Technologies for better human learning and teaching” (**deadline: 14 April 2015**):
 - European partners:** SME as potential End Users and/or Service Providers
 - Other EECA partners:** universities, colleges, high-schools + volunteer communities like IDGF as End Users
 - Proposal Co-ordinator to further develop the idea:** experts in educational techniques with solid experience in technology-enhanced learning (like Carinthia University of Applied Sciences, Austria); leaders in Science Gateway portals technologies (like MTA SZTAKI, Hungary)

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Thank you for your attention