An ELIXIR/GOBLET workshop: defining an e-learning lingua franca

EXCELERATE WP11 Training - sub-task 11.1.3 eLearning

Objective: This workshop will provide an overview of e-learning systems used within ELIXIR and GOBLET. The aim is to compare them, to understand their respective strengths and weaknesses, and to define a common e-learning 'language' to facilitate communication within and between the GOBLET and ELIXIR trainer communities. The outcomes of the workshop will be summarised in a draft white paper, describing the various e-learning approaches and their applications, and providing recommendations for their use.

Organisers: Brane L. Leskosek (SI), Teresa Attwood (UK), Michal Linial (IL) and Patricia Palagi (CH)

Motivation:

Within ELIXIR and GOBLET, there are many different views and understandings of what e-learning actually is. Examples of so-called 'e-learning' systems include: Massive Open Online Courses (MOOCs), such as those provided by Coursera, Udacity, edX or MIT OpenCourseWare; platforms for uploading and hosting course materials, such as that provided by GOBLET; platforms to harvest and link course materials together, such as in TeSS; and learning management systems (LMS), like Moodle, to name but a few. All of these can and have been brought together under the banner of 'e-learning'; however, they do not necessarily mean the same thing from user, developer or content- provider perspectives. To help the ELIXIR and GOBLET trainer communities work together more coherently, it is imperative to gain a clearer picture of the current e-learning landscape, and a clear and common understanding of what we collectively mean by e-learning. Ultimately, this will allow us to better serve our communities.

Workshop objectives and expected outcomes:

In this workshop, we will:

- Provide an overview of and compare different e-learning systems,
- Define a common ELIXIR/GOBLET e-learning vocabulary,
- Define the appropriate means to ensure an effective use of this vocabulary and the adhesion of the GOBLET/ELIXIR community,
- Define a common e-learning strategy,
- Make recommendations on the relative strengths and weaknesses of e-learning systems,
- Draft a skeleton white paper describing the various e-learning approaches and their applications, and summarising the workshop outcomes and recommendations.

Workshop description:

Audience: ELIXIR and GOBLET members. Maximum 30 participants.

Dates: 15-17 September 2015

Location: [University of Ljubljana, Faculty of Medicine, Vrazov trg 2, Ljubljana](#), SI (see address at Vrazov trg 2, GPS coordinates are 46.051370 N, 14.518528 E). According to the Lonely Planet, Ljubljana is "one of Europe's greenest and most livable cities, with a vibrant cultural, café and nightlife scene that gives it the feel of a perpetual street party". Its central position also serves as the ideal base to explore Slovenia, which is "as picture-perfect as Switzerland, but much easier on the wallet".

Preliminary program:

The talks will briefly cover:

- the technical aspects related to the e-learning method of choice (software, infrastructure, *etc*.);

- the costs involved to setup and maintain the e-learning method of choice;

- the training context in which it has been used (target audience, learning objectives, teaching method and environment);

- the method used to assess the quality of the e-learning method and the evaluation results;

- the evaluation procedures used to assess the pedagogic effectiveness of the e-learning method, and the results of the assessment.

1st day: 15 September 2015, 16:50 - 19:00

16:50   Welcome & logistics

17:00   Philipp Compeau (Computational Biology Department, Carnegie Mellon University, USA) - Lessons learned from three MOOCs hosted on Coursera

17:40   Anthony F. Camilleri (the Knowledge Innovation Centre) - Metrics and assessment of the quality of e-learning methods and tools

18:20   Victoria Nembaware (H3Africa Consortium, South Africa) - H3Africa eLearning Strategy

19:00   Dinner

2nd day: 16 September 2015, 9:00 - 18:00

Presentations from ELIXIR node representatives who have some e-learning experience:

09:00   Teresa Attwood (University of Manchester, UK): TeSS, GOBLET and EMBER

09:30   Richard Grandison (EBI, UK): EMBL-EBI's Train online eLearning portal

10:00   Ronen Tal-Botzer (Bar Ilan University, IL): Scalable Personalized Education: Data science approach for evaluating open-ended assignments in MOOCs and providing personalized feedback

10:30   Coffee break

11:00   Brane L. Leskosek (University of Ljubljana, Faculty of Medicine, SI): ELIXIR.SI eLearning platform - EeLP

11:30   Grégoire Rossier (SIB Swiss Institute of Bioinformatics, CH): e-proxemis, eBiomics, Moodle and stand-alone e-learning modules

12:00   Pedro Fernandes (Instituto Gulbenkian de Ciência, PT): Engaging Learning experiences

12:30   Lunch break

14:00   Group Discussion Session #1: Agree on definitions, terms and vocabulary used.
15:00   Group Discussion Session #2: Agree on ELIXIR strategy for e-learning, options and best uses.

16:00   Coffee break

16:30 Group Discussion Session #3: ELIXIR e-learning and relations with other ELIXIR Platforms and EXCELERATE Workpackages
17:30   Social activity and networking dinner

3rd day: 17 September 2015, 9h - 13h

9:00   Group Discussion Session #4: Draft a skeleton white paper describing the various e-learning approaches and their applications, and summarising the workshop outcomes and recommendations
10:30   Coffee break
11:00   cont. Group Discussion Session #4: Draft an skeleton of paper describing the various e-learning approaches and their applications, and summarising the workshop outcomes and recommendations
12:30   Lunch & Departure