The Greek Universities Open Courses Program

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Summary

Since 2012, twenty five Greek Higher Education Institutes (HEI) have participated in a coordinated nationwide effort for developing open courses, available to the general public, from their undergraduate and graduate programs. After three years of development, more than 3.500 high quality open courses with common specifications are available through a national open courses portal. We present the contributions of a horizontal project, designed to coordinate and support the projects of the participating HEI, regarding to course specifications, design guidelines, training, technical approach (architecture & hosting), and the developed software platforms and products.

Extended abstract

Offering open educational material of high-quality for free over the Internet has started the revolution of "opening up higher education" [1-3]. At the same time, the emergence of MOOCs (Massive Open Online Courses) [4-6] has created new potential and has raised intense debate about their future role in higher education. In this context, the majority of the Greek Higher Education Institutes (HEI) - Universities and Technological Education Institutes - have launched projects for developing open courses, available to the general public.

In addition to the HEI's Open Courses projects, the horizontal project "Central Repository of Greek Open Courses" [7] has been launched at national level in order to coordinate and support the aforementioned HEI projects in developing and providing the open courses. It was carried out by the Greek Academic Network (GUnet) [8] - a non-profit organization formed by the Greek HEI. This group of projects forms the Greek Open Academic Courses Program, which has been funded by the Greek Ministry of Education in the context of the Operational Program "Life Long Learning" [9], cofinanced by Greece and the European Union.

The main objective of the projects is the creation and provision of open academic courses, i.e. courses taught at Greek HEIs that have been adapted to the digital environment, and they are freely available over the Internet to everyone. The open courses do not form any kind of distance learning program. The term MOOCs is not used for the developed courses because a) the content is always available, not only during a specific time period as in MOOCs, b) presently, no support nor certifications are provided. Anyone may access the open courses without registration: the target groups are students and graduates, researchers, professionals, lifelong learners and whoever wishes to extend or renew their knowledge. Open courses provide a free learning environment for the general public, consistent with the mission of the public HEIs. The participants gain new knowledge, training and learning opportunities.

After three years of development, more than 3.500 high quality open courses with common specifications from 25 HEIs are available at the national portal developed for the open courses. Presently, the open courses account for more than the 7% of all the courses taught at Greek HEI, covering a wide range of topics. The most covered subjects are Natural Sciences (25,99%), Humanities and Arts (14,88%), Engineering and Technology (14,67%), Social Sciences (13,97%), Medicine and Health Professions (6,16%), Agricultural Sciences (1,52%).

Based on their educational content, the open courses are classified in three different categories:

- A- courses: provide the learner with course description and goals, keywords and glossary terms, educational material organized in course units, notes or/ and presentation slides, bibliography,
- A courses: in addition to A- provide podcasts synchronized to presentation slides,
- A+ courses: in addition to A- provide exercises and quizzes, digital resources and multimedia educational material. Please note that only A+ courses include videolectures as part of the educational material.

More than 500 technical staff have collaborated with more than 3.000 faculty members (about 15% of all faculty members) in order to develop the courses. These numbers show that one of the most important goals - the creation of more awareness regarding open courses, open educational resources and open education in the faculty members - has been achieved.

Apart from raising awareness, the other main objectives of the horizontal project were

- the design, development and operation of the i) National Open Courses Search Gateway (NOCSG) [10],ii) the Open Delos platform [11], a rich media and lecture platform for education, iii) the upgrading of the Open eClass platform [12] in terms of architecture, user interface and functionality to support open courses
- the drafting of common specifications for the open courses structure and the required equipment for the development phase
- the provision of guidelines, training and consulting services, related to the development of open courses, to the HEI staff
- the central hosting of open courses to achieve economies of scale
- the awarding of the best open courses and the promotion and dissemination of the results

This paper discusses the aforementioned objectives and the support provided by the horizontal project to the institutional projects.

In conclusion, the open courses program has had a strong impact on the Greek academic community and has raised awareness on open education and OER: it has created more than 3.500 open courses and involved more than 3.000 faculty members. This program may serve as a good practice example for other countries and academic communities.

References

- [1] MIT OpenCourseWare. http://ocw.mit.edu
- [2] Open Education Consortium. http://openedconsortium.org
- [3] Pan-European initiative OpenupEd around so-called MOOCs. http://openuped.eu
- [4] Coursera online courses. http://coursera.org
- [5] Edx online courses. http://edx.org
- [6] Udacity online courses. https://www.udacity.com
- [7] Project "Central Repository of Greek Open Courses", http://project.opencourses.gr
- [8] Greek Academic Network (GUnet), http://www.gunet.gr
- [9] Operational Program "Life Long Learning", http://www/edulll.gr
- [10] The Greek Open Courses Search Gateway, http://opencourses.gr
- [11] The Open Delos platform, http://www.opendelos.org
- [12] The Open eClass platform, http://www.openeclass.org

Author biographies

Dr. Pantelis Balaouras holds a PhD degree in Informatics and Telecommunications and a Diploma in Computer Engineering. He is in charge of the multimedia-based e-learning and communication services at the Network Operations Center of the National & Kapodistrian University of Athens. He also serves as the technical director of GUnet's Center for e-learning and media production (mc.gunet.gr), and

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