13th International Conference eLearning and Software for Education
Could technology support learning efficiency?

Book of abstracts

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was focused on: (1) DL (Distance Learning) study programs (design, accreditation, implementation, development); (2) the efficient use of digital technologies in education. That is why the central theme of the eLSE'2017 conference ("Could technology support learning efficiency?") is very exciting for the authors! In brief, the key points are to communicate and to collaborate with students and teachers through electronic platforms, in the cloud. This article is organised into 4 chapters. Chapter 1 will give a general review of cloud computing concept and will present the digital technology services usually provided in the "cloud". Chapter 2 will include a number of initiatives and projects promoted by the authors; those projects demonstrate interest and concern of the authors in promoting digital technologies in education (continuously, during the last 25 years!). Chapter 3 - Starting with 2010, the authors developed projects including cloud computing/technologies especially those related to Google and other electronic platforms. The authors develop their activities in the academic institutions where the communication and collaboration between students and teachers are crucial; the authors have used efficiently cloud technologies like Gmail, Google Classroom, Google Drive etc. Chapter 4 includes authors' conclusions and recommendations for decision makers in the domain of education.

**Keywords:** cloud technology; higher education.

**RETHINKING EDUCATION – DDLUB’s INITIATIVES AND ACHIEVEMENTS**

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**Abstract:** The authors of this article have major contributions to the establishment and development of DDLUB which is the acronym for Distance Learning Department, founded in 1999 through the University of Bucharest Senate’s Decision. During the last 18 years, DDLUB has focused on DL (Distance Learning) study programs according to Romania legislation. DL in RO is equivalent with blended learning concept known all over the world. This article is aiming to present DDLUB’s initiatives and achievements, reported early in 2017. Chapter 1 will present the socio-economic context. There are remarkable events that have been taken into consideration by DDLUB team. The main conclusion of these events can be summarized as follows: we are living, teaching/learning and working within the Information Society. Teaching and learning according to the 21st Century requirements (including digital technologies) are our main responsibilities! Chapter 2 is dedicated to the educational context. There are worldwide trends focusing on "rethinking education". The authors took into consideration the recent evolutions within the domain of online education: Coursera, edX, Khan Academy, LinkedIn Learning, MIT Open Courseware, and CISCO Networking Academy. Meanwhile, we notice that a significant number of voices underline specific weaknesses of the RO system of education (e.g. "Court of Auditors Report 2016", "Study-42% of Romanian is functionally illiterate"). The following two chapters will present: achievements related to DL study programs provided by DDLUB for the target group of teachers (in-service and pre-service), in Chapter 3; initiatives and achievements related to the use of digital technologies in education, in Chapter 4 5 are dedicated to DDLUB 2017(+) vision on education.

**Keywords:** distance learning, ICT in education.

**PROBLEM SOLVING COMPETENCE DEVELOPED THROUGH A VIRTUAL LEARNING ENVIRONMENT IN A EUROPEAN CONTEXT**

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Abstract: In modern societies, life itself is a problem solving. OCSE-PISA defined the problem-solving
competence as the capacity to engage in cognitive processing to understand and solve problem situations where
a method of solution is not immediately obvious. Hence in teaching Mathematics, and in general scientific
subjects, it becomes important to adopt new methods centred on student learning, which are able not only to
deliver knowledge but also to enhance the competence in problem solving. It is essential to start from simulated
real-life problem situations in order to explain new concepts, since it enables students to understand the
application of Mathematics as well as to enhance their ability to regulate problem-solving processes. The
University of Turin has adopted problem solving digital methodologies using a virtual learning environment
integrated with an advanced computing environment, automatic assessment and a web conference system. This
set of technologies promote interaction among students and help teachers guide and coach their students in
creating, conjecturing, exploring, testing and verifying. In the Erasmus+ Project SMART – Science and
Mathematics Advanced Research in good Teaching – the University of Turin shared these methodologies with
other European partners (Strategic Partnership Key action). The aim of this exchange of best practices is to
obtain Mathematics and Science teachers who are more involved in the methodology and consequently students
who are better equipped to develop coherent mental representations of problem situations, more flexible in
incorporating feedback and in reflecting. In the paper, examples of interactive material produced and tested in
the Project are presented and the results of the experience are discussed.

Keywords: Advanced Computing Environment; Mathematics learning; Problem Posing; Problem Solving;
Teaching good practices; Virtual Learning Environment.

LINKEDIN AS A RESEARCH COMPANION.
ASSESSING THE LEARNING BENEFITS OF AN ENTREPRENEURIAL
PROGRAM THROUGH A QUASI-EXPERIMENTAL APPROACH

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Abstract: In this paper we introduce a quasi-experimental methodology to assess the benefits of an
entrepreneurial learning program, based on LinkedIn profile data. We compare the career paths of two cohorts
of participants in the mentoring sessions of the Innovation Labs pre-accelerator, compared with a control group
formed by persons of similar age and entrepreneurial interest who did not benefit from the added value of the
mentorship program. We appraise the advantages and limitations of studying online traces of professional
identity in LinkedIn public profiles.