The “Teaching to Teach with Technology” Project: Promoting Advanced Games Technologies in Education

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Abstract

In a recent review-article Selfton-Green (2006) has discussed different definitions of formal and informal learning linked to the context of learning. Both trainers and students have rules, strategies and learning patterns that differ according to age (as cognitive and psycho-social development; eg “digital natives” vs. “digital immigrants”; Bennett, Maton, Kervin, 2008). Therefore, it is crucial to identify strategies of using technology that will be appropriate and consistent with the target of the intervention, in order to produce effective teaching strategies and able to stimulate a real path of “active processing” of information (Mayer, 2000). In this respect, it is known that the use of serious games is particularly appropriate for young people (Jessen 2001; Laudon & Sørensen 2004), but the use of new technologies is difficult in formal learning contexts, with mature individuals accustomed to different types of training (Selfton-Green, 2006).

Against this background, the “Teaching to Teach with Technology (T3)” project (funded by the EU Leonardo Da Vinci Life Long Learning Program, www.t3.unina.it) designed and validated an innovative teacher/trainer program, demonstrating realistic ways of exploiting advanced techniques within the real constraints facing teachers in their work. This contribution presents main steps of this project (in which university teaching staff, school teachers and trainers familiarize with technologies and simulated learning sessions), with a specific focus on the selection of technologies, and discusses the future implications for educational programs.

Results of T3 program are consistent with the literature (Alessi, 2000) and they stress the importance of game-based learning, clarifying that it is a balance between conceptual (teaching about) and procedural (teaching how to do) knowledge. In brief, advanced games technologies (computer games, augmented reality, robotics) could address many of the limitations of traditional instructional methods; games have the ability to motivate learning, increase knowledge and skill acquisition and support traditional teaching methods.