Editorial

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I am proud to introduce the second issue of the International Journal of Serious Games (IJSG), which is a special issue mostly dedicated to the best papers of the Games and Learning Alliance (GaLA) Conference 2013, that was held in Velizy, Paris, at Dassault Systèmes. The conference involved regular papers and a set of workshops and an industrial exhibition, featuring interesting companies and products from France and beyond.

The GaLA conference aims at bringing together researchers, developers, practitioners and stakeholders operating in the field of serious games (SGs). The goal is to create a forum where to share the state of the art of research and market, analysing the most significant trends and discussing visions on the future of SGs.
Like the IJSG, GaLA Conf is managed by the Serious Games Society (SGS), which is building a scientific community at international level for shaping future research in the field. This community represents a significant blend of industrial and academic professionals committed to the study, development and deployment of serious games as really useful and effective tools to support better teaching, learning, training and assessment.

At the time I am writing these notes, we are just closing the GaLA Conf 2014 programme. This edition will be held in Bucharest, July 2nd-4th, and I am proud to announce that the selected papers will be published in the IJSG October 2014 issue. It will be exciting to gather the community together in Eastern Europe, see the latest advances from the field and discuss trends and challenges.

As stressed in the call for paper, we seek to address the need for scientific and engineering methods for building games as means that provide effective learning experiences. An effective application of SGs for education and training demands appropriate metrics, analytics, tools, and techniques for in-game user assessment, in order to allow meeting the educational goals, provide proper user feedback and support adaptivity. This can be achieved in particular by measuring elements such as learning outcomes and engagement, considering the twofold nature of SGs as compelling games that achieve some precise educational goals. We believe that this is necessary in order to develop a new generation of SGs that are able to meet the above mentioned expectations and requirements for more effective education-supporting tools.

The present issue includes three articles selected as best papers from GaLA Conf 2013 (they are the first ones in the following list), and two regular articles.

“Measuring Effectiveness in Digital Game-Based Learning: A Methodological Review”, by All et al., investigates digital game-based learning (DGBL) effectiveness assessment and proposes a mapping of current assessment methods. Results showed that comparison of results across studies is problematic due to diversity in and suboptimal study designs. This is a significant gap to be addressed in future research.

“An Agent Based Approach to designing Serious Game: the PNPV case study”, by Gentile et al., proposes an agent-based methodology to allow the designer to bring forward the assessment of educational effectiveness to the design phase and to seek an equilibrium between educational effectiveness and entertainment, realism and complexity.

“Serious Gaming Analytics: What Students´ Log Files Tell Us about Gaming and Learning”, by Westera et al., explored existing log files of a master level serious game that supports inquiry-based learning. The authors used learning analytics to extract data and find patterns from the logging and were able to establish a model that uses switching indicators (i.e., players switching between various game objects such as written resources, video clips, and game locations) as predictors for learning efficiency.

"Eye Tracking in Game-based Learning Research and Game Design", by Kiili et al., exploited eye tracking to explore the game-based learning process and the perception of user interfaces of four educational games. Their results show that eye tracking can provide important information from game based learning process and game designs, but they also highlight that it should be complemented with offline methods.

"Collaborative Language Learning in Immersive Virtual Worlds: Competence-based Formative Feedback and Open Learner Modeling", by Kickmeier-Rust et al., presents a role model for teaching English as a second language using OpenSim and a tool that enables teachers to perform real-time learning analytics and direct formative feedback and interventions in a virtual learning session. Also we present an approach to aggregate and store the learning information into open learner models.