Editorial

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I am pleased to conclude, with this fourth issue, the first year of IJSG publications.
It has been an exciting year, in which we started this challenge – in spite of some perplexity, also from friends - and were able to become a reference point for scientific and technological research in the field of serious games and game-based learning.
I am proud of what has been done, since we managed to publish, every quarter, five original research papers from authoritative researchers. The published papers cover several aspects, ranging from serious game design to technology, from applications to pedagogy. Several works have been prepared by interdisciplinary teams, which shows the importance of the dialogue between different disciplines in order to develop useful products.
All this could happen thanks to the growing relevance of the serious game field but also to the authors - who had the courage to bet on a new journal, initially with no ISSN, DOI nor indexing - and to the effort and quality of an outstanding team of editors and reviewers, that was able not only to select the submitted papers, but also to accurately coach the authors in order to enhance the quality of the manuscripts.

I would like to thank the several section editors, who managed the paper evaluation and editing processes: Jannicke Baalsrud-Hauge, University of Bremen; Francesco Bellotti, University of Genoa; Riccardo Berta, University of Genoa; Kristian Kiili, Technological University of Tampere; Theo Lim, Heriot-Watt University, Pablo Moreno-Ger, Universidad Complutense Madrid; Michela Ott, of the Italian National Research Council; Goncalo Pereira, Inesc-Id; James Ritchie, Heriot-Watt University; Margarida Romero, Universitè Laval; Remco Veltkamp, University of Utrecht; Wim Westera, Open University Netherlands.
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I would like to thank the Serious Game Society (SGS) management, namely Elisa Lavagnino and Antonie Wiedeman, for their support, especially in the editorial phase.

I am happy to inform the readership also that, from this issue, the IJSG has also started featuring a DOI number for each article. Finally, next issue (January 2015) will be dedicated to the best papers selected from the Games and Learning (GaLA) Conference, that was held in Bucharest in july 2014.

This issue features three significant user studies. Nagle et al. [1] investigate reward schedules, i.e., determining when in-game rewards should be given. Using a simple memory training serious game, the authors compared different methods of scheduling rewards based on two main paradigms: fixed ratio schedule and variable ratio schedule, in which rewards were given after a pre-defined or unpredictable number of correct responses, respectively. The different versions of the game were tested by 210 participants online. On average, the variable-ratio schedule was better in the outcome measures than the fixed-ratio schedule. The results highlight the importance of in-game rewards and highlight the effectiveness of giving rewards according to a variable-ratio schedule especially following the user's preferences.

Bowers et al., [2] performed a study to determine best practices for designing a game to train active listening skills in complex environments. 119 U.S. Navy recruits participated in the evaluation study, and results indicated that games with degraded auditory conditions did not improve listening abilities in a transfer condition. Games using recorded human voices resulted in the best performance.

In "Assessing 3D Virtual World Disaster Training Through Adult Learning Theory" [3] Taylor-Nelms L. and Hill V., examined the extent to which 3D virtual tornado simulation trainings (based on a Second Life implementation) follow the principles of adult learning theory. Through a three-

fold methodology of observation, interviews, and reflection on action, trainings in a "safe" place were analyzed and the qualitative results confirmed that 3D virtual worlds seem to align with some classic tenors of adult learning theory.

Plantevin et al., [4] address the use of ecological interactions for a mobile serious game. In particular, they analyse the processing of the signals from a wearable insole in order to allow users interact with a virtual soccer game via real-world soccer movements. Results from a preliminary study showed that proposed system can be exploited for real time gesture recognition on a mobile device.

Deng et al. [5] present a research review that illustrates the emerging use of multimodal virtual reality, discussing why cognitive processes involved in learning and training may be enhanced under immersive virtual environments. The paper presents some innovative applications that have already combined eye tracking and haptic devices in learning-based games. The conclusions finally suggest possible areas for new serious game applications.

Finally, we have a letter to the editor, Gamification can provide new perspectives to help training people with Alzheimer and their caregivers, by Arambarri et al. [6], where the authors state the great interest towards new, game-based educational tools related to the Alzheimer disease and in particular aimed at training caregivers especially in families.

The evaulation processes for this IJSG issue were managed by Jannicke Baalsrud-Hauge, University of Bremen, Francesco Bellotti, University of Genoa, Riccardo Berta, University of Genoa, and Kristian Kiili, Technological University of Tampere.

References

[1] Nagle A., Wolf P., Riener R., and Novak D., The Use of Player-centered Positive Reinforcement to Schedule In-game Rewards Increases Enjoyment and Performance in a Serious Game, The International Journal of Serious Games, Vol. 1, Nr. 4, October 2014. http://dx.doi.org/10.17083/ijsg.v1i4.47

[2] Bowers C., Hussain T., Procci K., Game-based Training of Resilient Listening Skills: The Effects of Degraded Communications, The International Journal of Serious Games, Vol. 1, Nr. 4, October 2014. http://dx.doi.org/10.17083/ijsg.v1i4.44

[3] Taylor-Nelms L. and Hill V., "Assessing 3D Virtual World Disaster Training Through Adult Learning Theory", The International Journal of Serious Games, Vol. 1, Nr. 4, October 2014. http://dx.doi.org/10.17083/ijsg.v1i4.40

[4] Plantevin V., Menelas B.-A. J., Use of ecological gestures in soccer games running on mobile devices, The International Journal of Serious Games, Vol. 1, Nr. 4, October 2014. http://dx.doi.org/10.17083/ijsg.v1i4.48

[5] Deng S. Kirkby J.A., Chang J., and Zhang, J.J13kz, The International Journal of Serious Games, Vol. 1, Nr. 4, October 2014. http://dx.doi.org/10.17083/ijsg.v1i4.24

[6] Arambarri J., de la Torre I., López-Coronado M., Álvarez I., Investigating the Potential market of a Serious Game for Training of Alzheimer's Caregivers in a Northern Spain region, Letter to the editor, The International Journal of Serious Games, Vol. 1, Nr. 4, October 2014. http://dx.doi.org/10.17083/ijsg.v1i4.36