Editorial

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I am very proud and pleased to introduce this issue, which closes the seventh year of the International Journal of Serious Games. Also, this edition features five papers, briefly presented in this editorial

In few days, the 9th edition of GaLA Conf will take place, organized by Iza Marfisi and her team of the University of Le Mans University. We will meet each other, even if only virtually, and continue the advancement of our community on serious games. As the previous years, the best papers from the conference will be invited to appear in a special issue in our journal.

With the end of the year, I take the opportunity to thank all the authors, reviewers and editorial members, who have contributed to another great volume of the IJSG.

"*A Fundamental Study for Gamification Design: Exploring Learning Tendencies' Effects*", by Zaric et al. [1], present results from a project aiming at creating a balanced, gamified learning environment in which all learners are equally engaged and interested. The paper presents the first steps towards the design of a balanced gamified environment, including a Personalized Gamification Design Model (PeGaM). The authors explored learners' learning tendencies as personalization criteria and conducted a study to investigate behavioral differences in and between students using a comparative experiment with students organized in a control and a treatment group. They identified a positive influence of badges, leaderboards, and experience points on learners with reflective, global, visual, and intuitive learning tendencies, and negative on students with sensing learning tendencies. Hence, the authors argue for introducing learning tendencies in the gamification design process and indicate the need for further research.

"*Exploring tactical choices and game design outcomes in a simple wargame 'Take that Hill' by a systematic approach using Experimental Design*", by Flanagan et al. [2], proposes using the Experimental Design (ED) technique in a simple wargame. By evolving the tactical turn game choices into playable full-game strategies, a descriptive set of game outcomes can be delivered and optimized to produce winning strategies. This provides a systematic approach to testing a game, with full post-game deconstructive analysis usable to identify flaws, and find optimal strategies in playing the game. According to the authors, the most successful strategies found by ED outperformed individual strategies developed by experienced players.

"*Scenario smells: signaling potential problems in dialogue scenarios in a serious game*", by Overbeek et al. [3], address a serious game for one-to-one communication skills training, namely Communicate, for which the authors develop a structured, scripted scenario as a sequence of interactions between a player and a virtual character. The paper introduces the concept of scenario smells, and investigates how to support scenario authors in detecting and addressing such scenario smells. A scenario smell is a symptom of a scenario that could be an indicator of an error or incorrect design in it. The authors present a tool that supports a scenario author by identifying possible smells in a scenario in Communicate.

"*Constructive alignment of learning mechanics and game mechanics in Serious Game design in Higher Education*", by Kalmpourtzis and Romero [4], focuses on Constructive Alignment, which concerns the proposal of constructively aligned learning experiences, where assessment is the result of specially selected training activities. The authors study the impact of an online MSc course on game design. Constructive Alignment in game design is approached as the coherence between Learning Objectives, Game Mechanics, Learning Mechanics and the Assessment in the educational Digital Game Based Learning. The results analysis shows that the Game Based Learning course had a positive impact on students regarding the proposal of game design documents with coherence between Game Mechanics and Learning Mechanics as well as Learning Mechanics and Learning Objectives.

"*Educational Board Game and Flashcard: Which one is better for learners at beginner level of Chinese language?*", by Wen et al. [5], intends comparing the impacts of flashcard and board games on the learning motivation, flow experience, and learning outcomes of learners of Chinese language. The research found out that both flashcard and board games have positively significant effects on learners' learning motivation, flow experience and learning outcomes. Learners in the board game group seem to have significantly higher learning outcomes than those in the flashcards group. On the other hand, the learning motivation and flow experience of the flashcard group are significantly higher than that of the educational board game group.

This issue also features a Communication paper, "*Designing a Virtual World to Mirror the Real Challenges of Life as an Amputee*", by Winkler et al. [6], whose research intends better understanding the experience of using a customized avatar in a virtual world to practice desired health behaviors. The authors stress that an amputation had a profound impact on the measure of health outcomes. This in turn masked the measured effect of the virtual self-management intervention on health outcomes. The authors argue that serious games could be used to facilitate disclosure of and adjustment to the salient factors and to better align the simulations with desired learning outcomes.

References

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