

Editorial

Alessandro De Gloria¹

¹University of Genoa, Italy, alessandro.degloria@unige.it

This issue includes four papers selected among the best presented at the Games and Learning Alliance Conference (GaLA Conf), that in 2021 was held in La Spezia, Italy, by Francesca De Rosa and her team. Three papers have been selected by a special reviewers group headed by the conference organizers. The introduction to the special issue and the papers is given by Francesca De Rosa (General Chair), Jannicke Baalsrud Hauge, Pierpaolo Dondio, Iza Marfisi-Schottman, Margarida Romero and Francesco Bellotti in [1].

In a couple of months, the 11th edition of GaLA Conf will take place in Tampere, Finland, organized by Kristian Kiili and his team. It will be a great opportunity to meet each other in person again, after two years, and continue the advancement of our growing community on serious games research.

Beside the special issue, this number of the International Journal of Serious Games also features two regular papers, that I briefly introduce in the following.

“Pilot Study and Gamification Analysis of a Theory-based Exergame”, by Kubota et al. [2], concerns theory-based exergame developed for tweens to promote their self-efficacy towards physical activity and increase their physical activity levels. Protocols from both health science and gamification research were used in piloting the exergame. The overall findings suggest that a theory-based exergame can positively influence the self-efficacy of tweens towards physical activity. The exergame showcased theoretical strength, achieved using diverse gamification elements. The study concludes that health-related components of the purpose of intervention must be incorporated in parallel with the engaging design of the game, taking into utmost consideration the theories, evidence as well as the needs and perceptions of its target users.

“Designing Serious Game Metrics for Family Caregivers of People with Dementia”, by Liu and Wills [3], presents a conceptual framework and a metric instrument for assisting design and evaluating serious games for dementia family carers as the first step towards designing a game specifically designed to cater for their needs. The authors constructed a conceptual framework identifying the relationship amongst carers’ needs, platforms and game contents (game play, avatar portrayal, game world graphics, sound / music and story-line). Based on these, the metric instrument is devised using the Goal Question Metric (GQM) method. An exploratory experiment was conducted with six health-related games and five game professionals to assess the effectiveness of the instrument. The authors found that the instrument can identify the successfulness of the games in terms of satisfying the three categories of needs of the carer, i.e., health, education and social, though it was suggested that a further experiment with more participants.

“The devil’s advocate: identifying persistent problems in serious game design”, by Wim Westera [4], argues that a number of persistent weaknesses in current serious game design practice pose a barrier to harnessing the games’ full educational potential. By taking up the role of the devil’s advocate, the author takes a critical look at current serious game design routines. The issues that are discussed include experiential learning, cognitive flow, motivation, scores and realism in serious games, among other things. Each topic is elaborated with reference to established educational research and is concluded and summarised



with a claim. The main purpose of this article is to contribute to the overall quality of serious game design by identifying and opposing unfavourable design routines

“Using a Serious Game in public schools for training fire evacuation procedures”, by Rodrigues de Carvalho et al. [5], describes the development of a prototype of a Serious Game to teach fire evacuation procedures in schools in the case of fire, aiming to help students to learn fire safety procedures, to know how to behave in case of fire, and to start discussions to create a positive fire safety culture. The prototype was used and evaluated by 35 public school students from 12 to 16 years old. The results indicated that students’ knowledge on how to behave in case of fire was significantly improved after playing the game, and the discussions triggered by the game contributed to the creation of a positive fire safety culture in school.

References

- [1] F. De Rosa, J. Baalsrud Hauge, P. Dondio, I. Marfisi-Schottman, M. Romero, F. Bellotti *“Introduction to the Special Issue on GaLA Conf 2021,”* International Journal of Serious Games, 9(3), 3-4, 2022. <https://doi.org/10.17083/ijsg.v9i3.559>
- [2] K. Kubota, E. Säteri, T. N. Joelsson, T. Mäkilä, S. Salanterä1, A. Pakarinen, *“Pilot Study and Gamification Analysis of a Theory-based Exergame,”* International Journal of Serious Games, 9(3), 63-79, 2022. <https://doi.org/10.17083/ijsg.v9i3.506>
- [3] N. Y.-C. Liu, G. Wills, *“Designing Serious Game Metrics for Family Caregivers of People with Dementia,”* International Journal of Serious Games, 9(3), 81-114, 2022. <https://doi.org/10.17083/ijsg.v9i3.532>
- [4] W. Westera, *“Using a Serious Game in public schools for training fire evacuation procedures,”* International Journal of Serious Games, 9(3), 115-124, 2022. <https://doi.org/10.17083/ijsg.v9i3.547>
- [5] P. V. Rodrigues de Carvalho, D. O. Ranauro, A. C. de Abreu Mol, A. Jatoba, A. P. Legey de Siqueira, *“Using a Serious Game in public schools for training fire evacuation procedures,”* International Journal of Serious Games, 9(3), 125-139, 2022. <https://doi.org/10.17083/ijsg.v9i3.484>