Editorial

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I am proud and honoured to open this first issue of the International Journal on Serious Games (IJSG). It represents the peak of an activity in the field of serious games (SGs) that a group of people belonging to the Games and Learning Alliance (GaLA) network of excellence (NoE) on SGs started some years ago.

This first issue represents the beginning of a new period that is even more challenging. The time of SG development as an artisanal process is ending, SG design, implementation and deployment is a scientific field well positioned in this new scientific era where multi-disciplinarity is the core of any research.

I am honoured because I have been called in this period to coordinate such a group of people; because a dream became reality; because of the outstanding scientific results that are being achieved.

I am proud because this journal represents the result of an effort performed with little resources and with the help of a few number of determined people.

The IJSG is completely dedicated to SGs and is open to every contribution that is of high quality. SGs are a learning tool for today and tomorrow, they are a jump-frog with respect to canonical approaches to teaching.

SGs offer to educators and students a new tool that is able to complement the current educational offer by meeting some key requirements such as contextualization, advanced visualization, interactivity, engagement, support for communication and collaboration, analytic performance and progress assessment.

However, SG design is a complex challenge, involving a variety of dimensions and disciplines, such as computer science, electronics, artificial intelligence, pedagogy, psychology, narrative, domain-specific knowledge. A successful 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. Moreover, use of SGs in educational settings should be properly organized. There is a clear need for developing and validating a set of scientifically validated engineering methodologies and tools enabling efficient and effective creation and use of SGs. The IJSG intends to build and grow a scientific academic and industrial community that is engaged in the development of new, powerful solutions and in the birth and uptake of a science of SG analysis, design and deployment.

All the IJSG papers should reflect such aims, by advancing the state of the art in the relevant area. Empirical studies are strongly encouraged. Sample research questions may include: how can pedagogical goals be mapped to game mechanics? How can different types of contents be "translated" into a game? What technologies/virtual environments are more suited to different educational goals? When to use a game? For what kind of students? For what kind of topics? Under what conditions? How should the teacher instruct, follow and correct students? What kind of learning analytics are most suited? How and for what could students be evaluated through games?

The IJSG is part of the broader SG Society (SGS), <u>www.seriousgamesociety.org</u>, of which it shares the aims and vision, representing the high-quality scientific tool to anticipate the future.

The journal can count on the experience of the GaLA NoE and on the support of the Serious Games Society (SGS) and of other outstanding scientific researchers. A committee of editors has been chosen that represents outstanding expertise at world level. The editorial board of the journal is composed of editors whose competences cover all the main research fields and application domains related to SGs. Each field is covered by at least two researchers. When a paper is submitted, the journal editor transmits it to one of the editors in charge for the paper's field. The field editor decides at least three reviewers from the IJSG database that is continuously extended. According to the response of the reviewers, the field editor submits a report to the journal editor, who decides to accept as is or with revisions, to review a new version or reject the paper.

In case of revision, the new version of the paper, once reviewed, will go again to the reviewers, until it gains a complete acceptance.

We devised this process in order to allow achieving a high quality of published papers.

The journal will follow an open gold publishing policy, allowing free access for both authoring and reading. Therefore, no fee is asked for publishing a paper or downloading.

We plan to publish four issues in a year, and each issue will have five papers. The next issue will be dedicated to the best papers presented at the GaLA 2013 conference.

A special thank goes to Francesco and Riccardo for their effort in publishing this issue, to the editors, reviewers and authors that have allowed a timely preparation of this first issue. Let me finally say a great thank you to all the scientific community that work on SGs and that believed in this initiative.



This first issue features a set papers that cover a variety of aspects, providing a wide overview of the field.

"Serious Games for education and training", by De Gloria et al., presents the main mechanics and models in SG designs, particularly for assessment, feedback and learning analytics. Indications for future research in the field are also provided.

"Best Practices for an Effective Design and Evaluation of Serious Games", by Catalano et al., presents an overview on the factors that make SGs effective for learning, and discusses the current SG evaluation models.

"Gamification and Smart, Competence-Centered Feedback: Promising Experiences in the Classroom", by Kickmeier-Rust et al., present the experimental evaluation results of applying a light weight tool for learning and practicing multiplications in Austrian classrooms. Some evidence has been found for the motivational aspect of gamification and, overall, for effectiveness of competence-centered feedback.

"Individual and collaborative Performance and Level of Certainty in MetaVals", by Usart and Romero, presents results from an extensive experimental study on the relation between the players' game performance and their metacognitive processes.

"Business models for Serious Games developers - transition from a product centric to a service centric approach", by Baalsrud-Hauge et al., presents an overview of the field from a business perspective.

