

Welcome message from the Editors-in-Chief

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On behalf of the Editorial board, we welcome you to the inaugural issue of the *EAI Endorsed Transactions on Game-Based Learning*. This journal addresses the exciting and innovative field of the use of games for learning, a booming area of research to which we hope to contribute by gathering relevant ideas and practice from top-level scientists and practitioners. On this first issue, special thanks are due to the support team from EAI and ICST who helped us in the preparation and setting up of the journal and this edition in particular.

Games are normally associated with entertaining, amusing and addictive environments. But games are highly structured contexts where players have clear objectives, well-defined challenges and explicit and implicit rules. To achieve victory players must overcome those challenges and face opponents (real or game characters) but always respecting the clearly-defined set of rules. Failure to follow these rules implies a punishment or penalty. Nowadays, computer games can involve one player acting alone, two or more players acting cooperatively, or players or teams of players competing between themselves.

The use of games for learning is effective because they create rich contexts where educational objectives can be embedded and where theoretical concepts can be applied to practical situations. Educational games promote the development of personal and social skills because they favour cultural awareness, socialization, respect for the others, teamwork, leadership, decision making and collaborative learning.

However, there is still a limited use of game-based learning in formal education. This has mainly to do with social concerns and stereotypes about the relation of games and education. Other issues relate to cost, access (for online games), maintenance and support and teachers' confidence in using a game for a specific curriculum goal. This limited use is also related to the lack of extended evidence of effective application. Therefore a journal like this one is necessary to demonstrate the validity of this learning methodology.

EAI Endorsed Transactions on Game-Based Learning is a multidisciplinary approach to the presentation of research, theory, application, practice and validation in the field of Game-Based Learning for any level and any area of education. As such it will cover areas like cognition, psychology, technology-enhanced education, evaluation and assessment, multimedia and information technology. By Game-Based Learning, we consider all forms of formal or informal learning which are supported by digital (or not) simulations, games, modelling, virtual and augmented reality, new interaction devices, toys and playthings.

GBL is interested in new scientific approaches and results from experiments and real-life applications. We invite submissions that deal with issues including, but not limited to:

- Technology, tools and systems for Serious Games
 - Game platforms, toolkits, frameworks, engines, APIs and libraries
 - Game interfaces (input devices, speech, gestures)
 - Content generation tools
- Immersive Environments, virtual environments, virtual reality, augmented reality, mixed reality use for Serious Games
- Games for education and training

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- Games for emergency and disaster management, crowd simulation, crime scene investigation
- Games for health, medical training, therapy
- Games and art
- Serious Games for other purposes
- Games for science and research
- Game platforms
 - Online, Multi-user games
 - Games for mobile, handheld, and connected systems
- Game Security and Networking
- Future Issues of Serious Games
- Accessibility and inclusive design for Serious Games
- Serious games design
- Gaming communities, games and society
- Evaluation of Serious Games

For this first edition, we have been especially careful in the contributions that we've selected. It has been a long and hard process to ensure a set of excellent articles with a balanced distribution of works focusing on theoretical and practical applications, for different age levels, in different areas. We plan to keep this balance in the upcoming issues, combining theoretical research and practice.

We start by an article from J. Read *et al* about the involvement of children as partners in serious games design. Authors reflect and demonstrate how to involve children in this stage of game development.

M. Sillaots takes this issue a step further by focusing on students designing educational games as an educational practice, *per se*. He describes a case-study in which 11 - 12 year old students designed educational games to learn English as a foreign language.

P. Escudeiro *et al* reflect on the relevant issue of defining and applying quality criteria for educational games. They propose a set of quality criteria and a method to assess the quality of educational games. They demonstrate it for a digital art game.

Then two articles address the use of games to develop programming and logic skills. H. Tsalapata examines learning paradigms that can be integrated into mathematics and science school education for developing logical thinking through game-based exercises based on programming. M. Zapašek *et al* deal mainly with the use of games to define programming knowledge and common problems in teaching programming.

Finally, R. Batista presents Timemesh, an online, multi-language, multiplayer, collaborative and social game platform for sharing and acquiring knowledge of the history of European regions.

In two short-articles, two European networks concerned with serious games are presented. GALA – Games and Learning Alliance and SEGAN – Serious Games Network are on the upfront of the European approach to Game-Based Learning and Serious Games.



Carlos Vaz de Carvalho holds a PhD in Information Systems and Technology from the School of Engineering, University of Minho. He is a Professor in the Department of Computer Engineering from the Engineering Institute (ISEP) of the Polytechnic of Porto. He was a researcher at INESC (Group for Computer Graphics), an institution of private R & D between 1988 and 1996. Thereafter, he developed his scientific career in the field of e-learning at ISEP, where he is currently the Director of GILT (Graphics, Interaction & Learning Technologies) an R&D Group. He has tutored/is tutoring eight doctoral thesis and 30 MSc dissertations, authored over 125 publications and communications, including nine books (as author and editor) and participated in over 20 national and European projects, coordinating seven of them.



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