EDITORIAL
GAMES AND LEARNING: CONSOLIDATING AND EXPANDING THE POTENTIAL OF ANALOGUE AND DIGITAL GAMES

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For a long time, Games Research suffered from what Jaakko Stenros and Annika Waern classified as the Digital Fallacy – the tendency to regard analog games as a subset of digital games rather than the other way around. Where boardgames were once associated with the past of games and learning and digital games with the future, there are now fresh insights and applications for boardgames in learning – alongside with their renaissance as games for entertainment. Even as boardgames found new relevance in learning, the already-recognized possibilities in digital games for learning have continued to expand, with more flexible and ubiquitous tools and platforms allowing for a greater variety of avenues of learning research and practice to be explored. Augmented and mixed reality as well as virtual reality are frontiers in learning that beg for further exploration.

This issue of the International Journal of Film and Media Arts is dedicated to games and learning with a recognition that games and learning are no longer new. Games have always been connected to learning, and this connection was underlined with the coining of the term 'serious game' by Abt a little over fifty years ago. The connection was strengthened by Gee's observations on how of how games recruit excellent learning and by the literacy of games, through games, and in games, becoming a lively field of research and learning practice going back fifteen years. Games and learning have become a fact of life. Entire programs for learning with games have been implemented across a significant cross-section of disciplines and learning contexts. Robust studies of real applications of games in learning have been carried out, alongside the building of a robust body of method for designing games

and pedagogy together. Games have become a realistic option for training in solving wicked problems, with non-obvious solutions, wherever creative, systems-oriented thinking is required.

By no measure can games and learning be treated as a novelty. Failure to harness the power of narrative for games and learning can no longer be excused with the notion that the medium of games is somehow young, somehow lesser than media such as film or television. The social impacts of games need to be fully reckoned with in the face of their use of learning in the classroom and beyond the classroom. The more potential for learning is discovered in games, the more urgent it becomes to harness more of their potential. The strengths of boardgames need to be consolidated into new approaches, and barriers to their use overcome. The use of games in learning and for serious purposes in general is still less ubiquitous than their vast potential would suggest. There is more to be done before they deliver on their full benefits.

This issue of the International Journal of Film and Media Arts seeks to contribute to asserting the maturity of games and learning. The relevance of games and learning makes their consolidation and expansion ever more urgent — solving long-standing problems and removing current barriers as well as multiplying the avenues of research and practice.

In *Modelling Urban Spaces with Cubes: Building analogue serious games for collaborative planning over maps*, Micael Sousa reports on real practice in putting the strengths of boardgames to use in a classroom environment precisely for teaching the kind of subject matter that calls of the use of games — wicked problems with ill-defined boundaries and non-obvious solution paths. In the reported practice, this is architecture students learning collaborative urban planning, with the added value of using real urban sites. Micael Sousa reports on two game boardgame designs and their use, where the design approaches specifically address the needs of instructors and students, such as cost and complexity of implementation, or the extent to which students participate equally in the activity.

Delivering the potential of boardgames and addressing them as a factual aspect of contemporary learning in need of consolidation is also tackled in *Game-Based Learning in Higher Education Using Analogue Games*, by Vicky Maratou and her co-authors. This paper takes the pulse of current challenges in the use of boardgames in higher learning through interviews with educators in multiple European countries, using a series of questions constructed through a literature review.

A salient issue for game-based learning is how to tackle issues of addictive behaviors in relation to games. The design of games for learning and of learning practices using games can be helped by a taxonomy of behavior for player types from the standpoint of dependency. Such a taxonomy is proposed and examined in *Game Player Types and Its Influence On Game Dependency* by Jiow Hee Jhee, Poh Xing Yong, Pauline Phoon, and Nicholas Gabriel Lim. This paper reports on a quantitative study of secondary education students where digital play behaviors were mapped to an adapted player typology.

Decision-making is a domain whose characteristics make games a highly-compelling learning solution. In *Using Game-Based Learning to Enhance Decision Making Under Uncertainty*, Dimitrios Lappas, Georgios Kottis and Panagiotis Karampelas delve into the nature of decision-making and describe a digital game-based activity that exposes this nature, and describe a study of decision-making for activity participants, towards better learning of decision-making through games.

Narrative is a deeply relevant dimension for games and learning, including beyond the classroom. For games and learning, consistent delivery of quality storytelling would allow more game learning in more domains, done more ambitiously, and with more compelling effects. The design of interactive narrative however is challenging to do, and hit-and-miss. In *Beats & Units: a Story-Game Design Framework*, Nelson Zagalo, Ana Patrícia Oliveira, Pedro Cardoso, and Mário Vairinhos describe a comprehensive multi-level framework for integrating game design and storytelling as to ensure the delivery of a quality story experience towards overall design goals. This methodology for narrative design has already been used in an applied game involving learning, where narrative helped learning.

In conclusion, games and learning have evolved into a more mature field of research and practice, where the potential of games in education and training is better established. While boardgames have seen a renaissance in their application in learning, digital games continue to expand their possibilities with new technologies such as augmented and virtual reality. The social impacts of games need to be fully reckoned with, as their use in learning becomes more widespread. This issue of the International Journal of Film and Media Arts aims to contribute to the consolidation and expansion of games and learning by showcasing real practices and addressing current challenges, including addictive behaviors, decision-making, and interactive narrative design.

Abt, C. C. (1970). *Serious Games*. Viking Press.

Gee, J. P. (2007). *What Video Games Have to Teach Us about Learning and Literacy: Revised and Updated Edition*. Palgrave Macmillan.

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