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Editorial by the Guest Editors

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Digital Game-based Learning can be seen as a subset of e-Learning that is extremely broad, aiming with varying approaches at different target groups with corresponding use-cases. It is a field that integrates at least the three domains of the socio-cultural question of play and games, the design and technological field of how to design play/games as well as what and how learning is and should be. The interconnectedness of these fields in Digital Game-based Learning is what makes it so fascinating but also hard to teach and research, as one must stay up-to-date in all aspects and developments. In this special issue of the Electronic Journal of e-Learning we thus wanted to present selected and extended papers – from the 8th European Conference on Games Based Learning (ECGBL) – to you that exemplarily span this dynamic and ever evolving field.

The first paper “Developing and Testing a Mobile Learning Games Framework” – by Carsten Busch, Sabine Claßnitz, André Selmanagić and Martin Steinicke – opens this eJEL issue with a comparatively rare context for game-based learning research: Private tutoring. Games can be used with varying goals in private tutoring: As a pure motivational or rewarding addition, as a means to foster retention of facts and figures so that the valuable face-to-face time is free to discuss motivational issues and learning strategies, or as deep integrated procedural learning experiences that can be framed and discussed in the private lessons. Each of these three is actually not differing from play-based approaches in schools but especially games targeting the latter two need to be especially good at showing parents that their children learn curriculum related content on the one hand and on the other hand being so engaging that students play these games in their spare time. Based on this use case the authors explain the development and testing of their mobile learning games framework, which consists of a conceptual part that specifies potential core-mechanics for mobile learning games and a technological part which is based on the game engine Unity. The paper describes these parts as well as their design-research oriented iterative development.

The second paper “Learning via Game Design: From Digital to Card Games and Back Again” – by Emanuela Marchetti and Andrea Valente – focuses on the promising field of learning by (re-)designing games. Based on the experience with two game prototypes – one being a settlement simulation that requires the placement of tangible tokens to place infrastructure elements, the other being a maths game – the authors found that children discussed both game and content related questions while teachers easily fell into the “guide on the side” role giving children space to be active social learners. This worked best with low fidelity prototypes that children should and could discuss while high fidelity prototypes obscured the models and rules resulting in discussions about graphical improvements instead. A further problem identified by the authors was that children did not have the technological skills to adapt the prototypes and thus could not really learn by (re-)designing the games. The authors thus tested the transformation of digital games into non-digital card game prototypes that children then could easily adapt. Last but not least the authors propose a round-trip engineering approach, so that the adapted card-based prototypes could finally be re-digitized.

In the third paper – “Scenario Based Education as a Framework for Understanding Students Engagement and Learning in a Project Management Simulation Game” – Morten Misfeldt describes his concept of using a competitive approach to project management simulations. Two groups play the simulation each managing their own project planning for a building site. Additionally each group acts as a disruptive force for the other team’s project plan. Each round students need to make decisions and take actions for their own project. They would then try to find loopholes in the planning of the other group and choose actions to delay the other

groups progress. Repeated over several rounds this clever strategy brings students to analyze both their own as well as the other team plans and decisions thoroughly. Learning to plan ahead and find weaknesses in their own and others plans. Mortens frames this with his view on scenario-based education and an interesting distinction between the simulative and the competitive gaming aspect.

The final paper in this issue is “Dynamic Pervasive Storytelling in Long Lasting Learning Games“ by Trygve Pløhn, Sandy Louchart and Trond Aalberg. Montola et al (2009) defined pervasive games as a subset of games that breach the magic circle (Hunzinger, 2011; Salen & Zimmermann, 2004) of a game either socially, spatially or temporally. Pløhn et al. focus primarily on breaching the temporal bounds of the game by spanning the game over nine weeks and dynamically interweaving it with real world events to foster in-game awareness. To bridge the sometimes long periods without any play or gaming activities these real world events were integrated into the storyline of their game Nuclear Mayhem and referenced by awareness raising actions – like sending in-character SMS or e-mail to the players. The latter should additionally motivate learning goal related activities without breaking the immersion of players. When integrating unpredictable current news items into a pervasive game one might choose two extreme strategies. Either integrate the news items into the main pre-scripted story-line – potentially breaking the narrative at some future point – or having no pre-scripted narration at all – hoping on the emergence of a story through the current social/political/economic/cultural developments. Pløhn et al. cleverly solve this by using a side-quest like concept that externalises the news items from the pre-scripted main narrative into story arcs that later on can be merged back into the plot.

We hope that you will enjoy the papers in this issue as much as we have and we would love to meet you at the 9th ECGBL 2015 in Steinkjer, Norway – or whenever you are in Berlin.

With best regards from Berlin,
Carsten Busch & Martin Steinicke
Editors

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