

PREFACE

Player and Learner eXperience—PaLX

PaLX Origins

In recent years, *game-based learning* or *gamification of learning* have gained momentum in the areas of interaction design and instruction design as well. In game-based learning, learning contexts are enhanced with games for learning in an interactive and playful manner, e.g., [3]. Alternatively, gamified learning contexts are enhanced with game elements (e.g., badges, leaderboards), are re-structured by following with game design principles, e.g., [1,4]. In general, games or gamification are inserted into a learning context for achieving a learning goal, and rely on play for engaging individuals across the learning experience, e.g., [2,5].

In game-based learning and gamification, learners are thus regarded as players. However, can design for learning and for playing be in tension with one another? Are there specific tasks, environments, characteristics of people or other factors that make it risky or difficult for designers to always treat learners as players? Once game-based or gamified concepts or solutions are created, how should their success be evaluated? Finally, what are existing successful or unsuccessful game-based or gamified solutions for learning that designers can learn from (sic)?

The Player and Learner eXperience (PaLX) focus section aimed at critically discussing such issues and, more generally, the equation “learners as players”, often given for granted or not sufficiently pondered over in the design of game-based or gamified solutions. The focus section originated from the PaLX workshop held at CHIItaly 2015, in Rome, and capitalised on the information acquired through this. Specifically, the focus section aimed at critically reflecting on how to design for a learner and player experience, how to evaluate it, and what designers can learn from existing game-based or gamified solutions or experience reports.

PaLX Contributions

The PaLX focus section was advertised through open calls worldwide. In total, the focus section received 13 submissions: 11 were from European countries, and the others from USA. Papers were first pre-screened for ensuring that they would be within the focus section scopes. Each paper, passing the pre-screening stage, received at least two independent reviews, and a third in case of conflicting opinions.

The topics proposed in the PaLX call for papers were reflected in the reviewed papers, and are reported in the below table.

Table. PaLX call for paper: game-based or gamification topics

Topics
Learner and player experience design guidelines or patterns
Design guidelines or patterns for users with special special needs
Game design and gamification principles for learning
Feedback design for playing and learning
Collaboration and competition design for playing and learning
Engagement design in playing and learning
Learner and player experience evaluation methods
Learner and player experience evaluation instruments
Learner and player experience case studies
Engagement evaluation in playing and learning
Learner and player experience products
Games for learning
Gamified objects, tasks or environments for learning
Smart gamified objects or environments for learners
The internet of gamified things for learners

The diversity in submissions was however also evident, which positively speaks of the vitality of the PaLX research area. Submissions referred to different theories or methodological approaches to the design of game-based or gamified solutions. Authors assessed the outcomes of their work from different and varied perspectives, reflecting the multi-disciplinary nature of research in the area, e.g., medicine, pedagogy, psychology. Most interestingly, submissions addressed further topics than those expected in the call for papers.

The topics that were addressed by the papers accepted in the PaLX focus section can be clustered into three main themes, discussed as follows.

Game-based or gamification and learners. Answering the PaLX challenge of reflecting on the equation “learners as players”, several submissions considered how to coherently integrate learning and play, for instance, how to merge player models (e.g., the Bartle model) and existing learning models, or how to conduct game design with learners. In this focus section, the paper by Lærke Weitze reports a framework and the author’s extensive PhD experience concerning gamified design of games for learning. The paper shows that engagement and motivation are crucial factors in learning contexts. Similar concerns are shared by the paper by Tran and Smørðal, reported in this focus section. Using achievement theory of motivation as reference framework, the authors do a fine-grained analysis of motivations to play and learn, and report their experience with a science museum game.

Game-based or gamification and educators or other education stakeholders.

Several other submissions addressed teachers' life-long learning and game based learning. In this focus section, the paper by Talamo et al. addresses the issue of fostering the creativity of teachers through the design of game-based learning scenarios. The paper by Pozzi and Persico tackles the issue of motivating teachers through gamification through an exploratory study: their paper shows how the authors gamified an already existing environment to motivate and sustain teachers in their design of collaborative learning activities for their students.

Finally, it is worth noticing that all articles of the focus section adopted a reflective attitude on the proposed game-based and gamified solutions, as solicited in the PaLX call for papers. We hope that their insights will help researchers, educators and practitioners design novel game-based or gamified solutions for learning.

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