Editorial

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The third issue of the tenth volume of the IJSG involves the following five regular papers.

"Serious Games and Experiential Learning: Options for Engineering Education", by Pacheco-Velazquez et al. [1], delves into the use of simulation games as a learning tool in logistics education, with a focus on two cases: the Logistics Simulator and the Production Game Simulator. The findings suggest that simulation games have great potential in logistics education as they facilitate faster and more enjoyable comprehension of key decision-making factors. Limitations of the study include the small sample size in both cases, which restricts generalizability, and the lack of consideration for sociodemographic factors in the baseline survey.

"Evaluation of an industrial case of gamification in software quality improvement", by Say et al. [2], qualitatively evaluates developers' experiences in a team-based, leaderboard-style gamification intervention in a large software house. Eight members of three different leaderboard teams with different standings in the final leaderboard were interviewed, and the transcripts were examined using Interpretive Phenomenological Analysis. The results showed that the gamification intervention did result in positive individual and team-based awareness and improvements in a range of technical practices. Post intervention, the participants discussed how their motivation, sense of belonging, and communication improved, also expressing concerns over attainability and fairness of gamification goals and relevance to existing workload.

"ReWIND: A CBT-Based Serious Game to Improve Cognitive Emotion Regulation and Anxiety Disorder", by Heng et al. [3], present ReWIND, a serious role-playing game (RPG) applying cognitive behavioral therapy (CBT) to design anxiety-relevant storylines and game mechanics. ReWIND intends to advance state-of-the-art mental health games by seamlessly integrating CBT elements and strategies into the game's storytelling so players can learn how CBT is applied in anxiety scenarios as they play through the game. The goal is to examine the effectiveness of ReWIND in improving cognitive emotion regulation and anxiety disorders. Reported findings from a randomized controlled trial with 40 participants show ReWIND significantly reduces the severity level of anxiety symptoms and trait anxiety levels and increases perceived control of anxiety better than the non-game task.

"Predictors of Flow Experience and Knowledge Acquisition in a STEM Game", by Jiahui Wang [4], aimed to systematically examine whether variables of technology acceptance and individual differences relevant to game-based learning may predict flow experience and knowledge acquisition in an educational game. Results indicated students' flow experience was predicted by some constructs of technology acceptance, namely, perceived playfulness and perceived attractiveness of the game. Five constructs of technology acceptance of the game, however, did not significantly predict learners' knowledge acquisition, although the correlation between perceived playfulness and knowledge acquisition from the game approached significance. Prior knowledge was found to be a negative predictor of knowledge acquisition (students with insufficient prior knowledge achieved greater knowledge acquisition from the game).

"Gamification Equilibrium: The Fulcrum for Balanced Intrinsic Motivation and Extrinsic Rewards in Electronic Learning Systems", by Dah et al. [5], identifies an overreliance on narrow models and shallow design (focusing solely on badges, points, and leaderboards, known as "BPL gamification") as contributing factors to the failure of some gamified systems. According to the authors, these approaches can lead to an imbalance between extrinsic and intrinsic motivation, resulting in the "Overjustification effect," a phenomenon that undermines the effectiveness of gamification. By providing a more nuanced understanding of how to select and apply game elements, the proposed study aims to mitigate these challenges and promote a more successful implementation of gamification, avoiding common pitfalls and clichés in design.

References

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