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Editorial

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This issue features fourteen regular papers, that are shortly introduced in the following.

“Primeiras Refeições: Serious Game to Improve Infant Feeding Knowledge”, by Doviggi Meyer et al. [1], proposes the “Primeiras Refeições” serious game to combat infant nutrition misinformation. In a study with 119 Brazilian university students, a significant knowledge increase occurred after gameplay, shown by pre-test and post-test scores. It targets future professionals and teaches practical skills like food preparation, demonstrating promise as a public health education tool.

“Exploring Player Archetypes in a Minecraft-Based Learning Environment", by Zambrano et al. [2], investigates how behavioral player archetypes relate to learning and interest development in an astronomy learning environment. Using data from 57 students, the study identifies roamers, explorers, and scientists through action analysis and clustering, revealing significant links between gameplay behaviors, motivation, and learning outcomes that inform educational game design.

“Multimodal Deep Learning Violence Detector for Child-Friendly Online Game”, by Prestiliano et al. [3], examines detecting violence in child-friendly online games using a multimodal deep-learning framework that analyzes visual and verbal aggression. By combining advanced models for each modality with a hybrid late fusion approach, the study achieves superior accuracy over existing methods and proposes an early warning system to support parental monitoring.

"eHealth Interventions for Children and Adolescents with Cancer: Scoping Review", by Homayounpour et al. [4], presents a scoping review of digital and game-based eHealth interventions for children and adolescents with cancer. Analyzing 46 tools, it highlights positive clinical and psychological outcomes alongside key gaps, including limited theoretical grounding, declining engagement, and insufficient personalization, and calls for more user-centered, theory-informed designs.

“GEMS: Evaluating the Relative Importance of Game Attributes”, by Pacheco-Velazquez et al. [5], introduces the Game Experience Multidimensional Scale (GEMS), a 13-item

instrument measuring the relative importance players assign to game attributes. Validated with 619 students, GEMS shows strong reliability and explains nearly half of overall game evaluation variance, offering a novel approach to understanding player judgments with future validation needed.

"Bodegus: A Serious Game Intervention to Shape Informal Business Practices", by Ding and Holland [6], explores whether the *Bodegus* serious game strengthens the link between perceived usefulness and intention to formalize business practices among Peruvian entrepreneurs. Using a pre–post design and Partial Least Squares Structural Equation Modeling (PLS-SEM) analysis, results suggest exploratory improvements post-intervention and highlight the game's value for ethical and behavioral education on business formality.

"eJamar and Exergames for Hand Rehabilitation: Four Case Studies", by Cela et al. [7], examines the feasibility of integrating the eJamar game controller and exergames into hand and wrist rehabilitation. In a small case series, the combined intervention was well tolerated and led to functional improvements, particularly in grip strength and range of motion, suggesting potential benefits as a complement to conventional therapy.

"Introducing the Visitor Design Pattern through a Digital Serious RPG Game", by Vahldick and Nolli [8], proposes a game-based "iSTEM-C" approach for young students, integrating STEM with constructive play. The authors argue that its success in boosting critical thinking, collaboration, communication, and creativity hinges on three key game elements: diverse tools, real-world problem rules, and developmentally-appropriate challenges.

"Exploring Pre-service Mathematics Teachers' Perceptions and Experiences Regarding Gamification in Mathematics Education", by Duran Dündar and Öztürk [9], explores pre-service mathematics teachers' understandings and experiences of gamification. Through interviews with eleven participants, findings reveal frequent misconceptions, limited theoretical grounding, and practical challenges in implementation. The study highlights the need for teacher education programs to provide structured, pedagogically informed training to support effective and meaningful use of gamification in mathematics education.

"Leaderboards or badges in two gamified forums: motivational and engagement differences", by Prieto-Andreu and Moreno-Ger [10], examines the isolated effects of badges and leaderboards on student motivation and engagement in online forums. A quasi-experimental study with master's students shows that badges encourage short-term participation, while leaderboards better sustain long-term engagement and social interaction, offering practical guidance for designing effective gamified learning environments.

"Operationalizing the United Nations' Sustainable Development Goals: a Game Jam Experience", by Luz et al. [11], examines the educational potential of a Sustainable Development Goals–themed Game Jam for undergraduate game students. Using mixed methods, it shows how collaborative game creation can foster critical reflection, civic awareness, and interdisciplinary learning, while also revealing gaps between intended learning goals and implemented game mechanics, informing future game-based learning design.

"Modelling Dilemmas in Access to Specialised Healthcare Services in Sweden Using a Serious Game", by Krishna et al. [12], presents a dilemma-based serious game design methodology to model delays in accessing specialised care within Sweden's public healthcare system. By integrating workflow mapping, stakeholder conflict analysis, and system constraints, the approach simulates socio-technical tensions, supports exploration of reform

scenarios, and offers a replicable framework for analyzing complex, publicly governed systems.

"Mathlien Land: a serious game to practice 7th and 8th grade mathematics", by Cristina Alonso-Fernández [13], presents *Mathlien Land*, an educational serious game designed to support mathematics learning for 12–14-year-old students. Addressing a gap in secondary-level math games, the study reports positive usability and usefulness results from early testing, while identifying areas for improvement and outlining plans for further evaluation and learning analytics integration.

"Engaging Youth in Urban Planning Discussions Using Minecraft: Challenges and Opportunities", by Lankoski et al. [14], explores the use of Minecraft as a game-based platform for engaging youth, particularly NEET youth, in urban planning. Through a qualitative case study with a Swedish municipality, it identifies how game familiarity, visualization affordances, and personal norms shape participation, highlighting Minecraft's role as a boundary object for inclusive participatory planning..

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