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# Volume 12, Number 3

## Assembled 2019

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## Editorial

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The Journal of Virtual World Research Assembled 2019 issue, presents six striking studies that spread over a plethora of subjects, all aimed to expand the Virtual World knowledge bank for the benefit of practitioners and academics alike. These studies broaden the understanding of a Virtual World user's experience associated with presence and immersion, governance within the worlds, learning success mechanisms, as well as users' interactions and relationships. Each of these topics provides traction in obtaining the highest advances in the application of Virtual Worlds within society.

The motivated editorial team for Assembled 2019 includes **Dr. Angie Cox**, Professor of Business Technology and Process Improvement, residing in Wichita Falls, Texas, USA, as the prime editor; **Dr. Felipe Becker Nunes**, Professor of Informatics in Education, from Santa Maria, RS, Brazil; **Dr. Miao Feng**, Research Scientist, from Chicago, Illinois, USA; and **Dr. Jason Coley**, Director of Academic Support Services and Planning, at Maria College, New York, USA. This team has worked to deliver a gorgeous blend of ingenuity, insight, and excitement to this issue. The six articles expand on hard-hitting topics such as player immersion and presence, situated identity, interaction and relationships, learning success, and governance.

In the first article, "**User Characteristics, Trait vs. State Immersion, and Presence in a First-Person Virtual World**" by **Lynna Ausburn, Jon Martens, Charles Baukal Jr, Ina Agnew, Robert Dionne, and Floyd Ausburn**, the authors present a quasi-experimental study investigating the

influences of age and gender associated with experiences of presence and immersion within Virtual World technologies. Their results not only suggest that while no significant relationship exists between gender and immersibility, but also age did play a significant role in users' immersibility. This is noteworthy discovery opens new avenues for research into immersion and presence and the effects of psychological traits and state theory.

In **Malek El Kouzi, Omar Bani-Taha, and Victoria McArthur's** manuscript titled **"Augmented Reality Plant & Animal Cells: Design and Evaluation of an Educational Augmented Reality Application,"** they developed and evaluated an Augmented Reality educational tool as supplemental learning support in a science classroom. Their study looked at the effectiveness of Vuforia Augmented Reality 3D and interactive software observing and surveying 15 students. Important findings and implications showed this tool sparked student interest and promoted understanding, responsiveness, enjoyment, comfort, and real-life experience and could be used for various learning applications. Results indicated AR can have a place in curriculum alongside textbook material to support individual student learning and to promote interest in STEM subjects.

The third article, **"Extending the self: Player-avatar Relations and Presence among U.S. and Chinese Gamers,"** **Zhenyang Luo, David Westerman, and Jaime Banks** present a study that investigated how player-avatar interactions and relationships associate with different sub-types of presence, specifically spatial presence, social presence, and self-presence. Additionally, the study compared American versus Chinese players to evaluate cultural differences between the two groups. They experimented by surveying 175 players to their measurement and structural model. Results indicated player interaction and relationships significantly related to types of presence. In addition, significant cross-cultural differences among these relationships were also found. With these findings, the gaming experience can be enhanced by concentrating on emotional connections between players and avatars within the realm of goals.

In **"GaeltechVR: An Immersive Virtual Environment to Promote Situated Identity in Irish Language Learning,"** **Naoise Collins, Brian Vaughan, Charlie Cullen, and Keith Gardner** draw on Situated Learning and Dörnyei's motivational self-system concept to guide design-based research on a Virtual Reality Language Learning platform called GaeltechVR. Their goal was to see how the design of GaeltechVR affected learners' attitudes, identity, and motivation in learning the local Irish language. Their study's findings provide design decisions, such as building levels in the immersive platform, which then facilitate scaffolding and increase the number of situated experiences. Furthermore, the research determined that this Irish-language learning platform helped reduced a significant issue associated with learners' language learning anxiety. The software also improved motivation to learn. Practitioners and software designers should take note of the key attributes of this platform.

In the fifth article titled **"Fast Cars and Fast Learning: Using Virtual Reality to Learn Literacy and Numeracy in Prison"** authored by **Jimmy McLauchlan and Helen Farley**, we gain the knowledge associated with incarcerated learners and the use of Virtual Reality. The idea of the research refers to a process of humanitarian socialization, where prisoners in New Zealand are afforded an opportunity to have a process of social and professional rehabilitation. Methodist Mission Southern partnered with Animation Research Limited to design and deliver a literacy and numeracy program contextualized within a virtual mechanic's workshop using Virtual Reality and tablet technologies. Preliminary data showed increased learning and greater involvement. This brings an idea for new teaching proposals for students with similar social issues to encourage therapeutic recovery.

In the final article, **"The Proto-Governance of Minecraft Servers"** by **Louis Rolfes and Kathrin Passig**, the authors discuss how many commercial game platforms impose rules on "their" communities leaving little opportunity for users to organize and police themselves; however, some environments allow the freedom for the user to self-regulate and govern within the game. The authors

used exploratory qualitative analysis on the Minecraft multiplayer online game, a platform that allows players to manage their own servers through traditional legal tools and software plugins. This analysis examined the interaction between traditional legal rules and algorithmic governance mechanisms and the forms of governance that were then established by the actors. The manuscript's theoretical discussion centered on concepts of 'governance,' 'constitutionalism,' and 'forms of government.' Results indicated Minecraft servers could be described mainly as "benevolent dictatorships," with some server rulesets revealing a willingness to abide by power-limiting rules in similar ways as constitutional documents limiting the power of the monarch. These findings add a surprising dynamic to the way we see server owners and players. Server owners may be willing to set self-limitations due to the external pressures of the players. This highlights a new understanding of politics within Virtual Worlds.