At the Heart of the Virtual City – Creating Global, Diverse, Accessible, and Environmentally Sustainable Communities of Practice Using Virtual Worlds

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Abstract. This poster presentation showcases how attending multiple virtual world conferences and events enable engagement with a global community of practice not otherwise accessible. The examples include the author's ongoing contributions to a virtual world resource center, and other virtual world initiatives at the author's university. The quality and persistence of virtual world events is evidence that accessible, affordable, and environmentally sustainable professional networking is possible, and this brief paper synthesizes the literature suggesting why adopting virtual worlds is more important than ever.

Keywords: Virtual Worlds, Communities of Practice, Second Life, OpenSim.

1 The Affordances of Virtual Worlds

Interest in virtual worlds peaked a decade ago, but lack of institutional support quickly left educators discouraged and simulations abandoned [1, 2]. Redesigning learning spaces and integrating mixed reality, however, are important trends amid a myriad of challenges facing higher education [3]. Confusion around terminology is another issue, and widespread adoption of virtual worlds will not happen without remediating a persistent knowledge gap in what makes them different [4]. While many educators have moved on [1, 2], the community of practice that remained developed relevant expertise and continue to articulate the value of virtual worlds in teaching [1]. Large numbers of those with the most experience want to move beyond Second Life [1], and open source platforms like OpenSim offer the same options with more freedom [1, 5,6,7], lower cost [8], and the ability to connect separately hosted worlds into an emerging metaverse [9].

At the heart of the word "immersive" is experiential and learning by *doing*. Interested educators would benefit from interacting with peers who have first-hand experience using virtual worlds in teaching [1, 7, 10]. Among other things, however, a successful community of practice needs options for different levels of participation, public and private community spaces, and it must be able to evolve to meet the needs of diverse people [11]. Virtual worlds meet these needs without requiring anything more than a computer with internet and a willingness to learn.

2 Increase Access and Diversity

Virtual worlds support access to global communities for those who are "ability diverse" [12]. Since 2007, Virtual Ability in Second Life has hosted free events and

professional conferences enabling people of all abilities to get into virtual worlds, socialize, and learn [13]. Virtual worlds can provide access to learning and socializing far beyond the isolated silos of our institutions, or physical and location limits. Virtual worlds also provide a sense of place and collaborative co-presence that facilitates development of a variety of communities of learning [7, 10], they are an effective way for educators to build and share their knowledge [10], they increase access to immersive learning for rural and disadvantaged populations [14, 15], they can support the development of skills in empathy and reflection [16], and they provide opportunities to express more nuanced representations of self [17], all of which is needed for global civic engagement.

3 Environmentally Responsible

With urgent concerns about global climate change, and the United Nations calling for a 45% reduction of greenhouse gasses over the next decade [18], it's essential we reconsider our options to increase access to collaborative communities. Researchers have long known about the impact of travel on the environment and technologies to promote sustainable professional development [19]. Web conferencing, however, does not provide the same sense of being embodied in a space and empowered to interact with others. The fact that more conferences are not held in virtual worlds is disappointing given that a variety of organizations have been doing this for a decade [20-24].

4 Conclusion

Virtual world technologies pose challenges to widespread adoption, but primarily when considered through the lens of expecting industry or institutional support [1, 2]. Virtual world pioneers demonstrate that leveraging virtual communities of practices enables us to do this for ourselves. Anyone can create, join, and help sustain international and interdisciplinary communities of practice, *right now*, and doing so empowers the robust collaboration needed to solve the complex challenges of the future that face our global community.

References

- Gregory, S., Scutter, S., Jacka, L., McDonald, M., Farley, H. & Newman, C. (2015). Barriers and Enablers to the Use of Virtual Worlds in Higher Education: An Exploration of Educator Perceptions, Attitudes and Experiences. Journal of Educational Technology & Society, 18(1), 3-12. Retrieved from https://www.learntechlib.org/p/160824/.
- Newman, C., Farley, H., Gregory, S., Jacka, L., Scutter, S. & McDonald, M. (2013). Virtual Worlds for learning: done and dusted? In Proceedings of Electric Dreams. Proceedings ascilite 2013 Sydney (pp. 622-626). Australasian Society for Computers in Learning in Tertiary Education. Retrieved from https://www.learntechlib.org/p/171188/.

- 3. Educause. (2019) 2019 Horizon Report. Retrieved from https://library.educause.edu/resources/2019/2/horizon-report-preview-2019
- Girvan, C. (2018). What Is a Virtual World? Definition and Classification. Educational Technology Research and Development, 66(5), 1087-1100. Retrieved from https://www.learntechlib.org/p/190068/.
- Czerkawski, B. (2011). Immersive Learning Experiences through Open Source Virtual Worlds. In T. Bastiaens & M. Ebner (Eds.), Proceedings of ED-MEDIA 2011--World Conference on Educational Multimedia, Hypermedia & Telecommunications (pp. 3783-3785). Lisbon, Portugal: Association for the Advancement of Computing in Education (AACE). Retrieved from https://www.learntechlib.org/primary/p/38404/.
- 6. Lansiquot, R. (2014). Facilitating Interdisciplinary Studies Using Open-Source Virtual Worlds. In J. Viteli & M. Leikomaa (Eds.), Proceedings of EdMedia 2014--World Conference on Educational Media and Technology (pp. 1084-1086). Tampere, Finland: Association for the Advancement of Computing in Education (AACE). Retrieved from https://www.learntechlib.org/primary/p/147627/.
- Steed, M. (2014). Virtual Reality Worlds for Teacher Education. In M. Searson & M. Ochoa (Eds.), Proceedings of SITE 2014--Society for Information Technology & Teacher Education International Conference (pp. 43-48). Jacksonville, Florida, United States: Association for the Advancement of Computing in Education (AACE). Retrieved from https://www.learntechlib.org/primary/p/130706/.
- Korolov, M. (2011). Second Life vs. OpenSim. Retrieved from https://www.hypergridbusiness.com/2011/05/second-life-vs-opensim/
- 9. OpenSimulator. (2019). OpenSimulator Hypergrid. Retrieved from http://opensimulator.org/wiki/Hypergrid
- Sanchez, J. (2016). Real Talk in Virtual Spaces: Examining Faculty Knowledge Sharing Cycles in a Social Virtual World. In G. Chamblee & L. Langub (Eds.), Proceedings of Society for Information Technology & Teacher Education International Conference (pp. 766-771). Savannah, GA, United States: Association for the Advancement of Computing in Education (AACE). Retrieved from https://www.learntechlib.org/primary/p/171766/.
- 11. Wenger, E., McDermott, R., and Snyder, W. (2002). Cultivating Communities of Practice. Boston, MA.: Harvard Business School.
- Despres, D. (2018). Our Digital Selves: My Avatar is Me [full feature film]. Retrieved from https://www.youtube.com/watch?v=GQw02-me0W4
- 13. Virtual Ability, Inc. (2019). Retrieved from https://virtualability.org/
- 14. Barker, B., Valentine, D., Grandgenett, N., Keshwani, J. & Burnett, A. (2018). Using Virtual Reality and Telepresence Robotics in Making. In Proceedings of E-Learn: World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education (pp. 564-568). Las Vegas, NV, United States: Association for the Advancement of Computing in Education (AACE). Retrieved from https://www.learntechlib.org/primary/p/185010/.
- Cloutier, J. (2018). Marginalized Urban Indigenous Youth and the Virtual World of Second Life: Understanding the Past and Building a Hopeful Future. Journal of Virtual Worlds Research. Volume 11, Number 2. Pedagogy - Taking Stock and Looking Forward (Part 1). December 2018. Retrieved from https://jvwr-ojsutexas.tdl.org/jvwr/index.php/jvwr/article/view/7322
- Reinsmith-Jones, K., Kibbe, S., Crayton, T. & Campbell, E. (2015). Use of Second Life in Social Work Education: Virtual World Experiences and Their Effect on Students. Journal of Social Work Education, 51(1), 90-108. Retrieved from https://www.learntechlib.org/p/159412/.

- Blackmon, S. (2015). The Pixelated Professor: Faculty in Immersive Virtual Worlds. The International Review of Research in Open and Distributed Learning, 16(1), 242-259. Athabasca University Press. Retrieved from https://www.learntechlib.org/p/160906/.
- 18. United Nations. (2019). UN Climate Action Summit 2019. Retrieved from https://www.un.org/en/climatechange/un-climate-summit-2019.shtml
- Anderson, L., Anderson, T. & Anderson, T. (2010). Online professional development conferences: An effective, economical and eco-friendly option. Canadian Journal of Learning and Technology / La revue canadienne de l'apprentissage et de la technologie, 35(2). Canadian Network for Innovation in Education. Retrieved from https://www.learntechlib.org/p/42984/.
- 20. OpenSimulator. (2019) OpenSimulator Community Conference. Retrieved from https://conference.opensimulator.org/2018/
- 21. Virtual Ability, Inc. (2019) International Disability Rights Affirmation Conference. Retrieved from https://virtualability.org/idrac/
- 22. Virtual Ability, Inc. (2019). Mental Health Symposia. Retrieved from https://virtualability.org/mental-health-symposia/
- 23. VWBPE. (2019). Virtual Worlds Best Practices in Education Conference. Retrieved from https://vwbpe.org/
- 24. VCARA, (2019). 10th Annual VCARA Conference: April 23, 2019. Virtual Center for Archives and Records Administration. School of Information, San Jose State University.