

**Martin A N Khamala\*** (2016). Future Classrooms of Virtually Manipulated Minds. Ethical concerns of artificially intelligent, virtual reality experiences. First International Information and Knowledge Management Conference Transformative Information for Sustainable Development 24<sup>th</sup> -26<sup>th</sup> August, 2016. \**Department of Design and Creative Media*

### **Abstract**

The adoption of real-time digital simulations in computer mediated learning situations, brings the ethics of human computer interactions into focus. The conceptual framework of this study, is centered around the moral implications of virtual reality (VR) from a sociocultural perspective in immersive Intelligent Virtual Reality (IVR) classrooms.

Acknowledging the unique ethical challenges artificially intelligent simulations bring forth, this paper attempts to explore potential repercussions of exposing learners and teachers to VR learning experiences. Consider virtual worlds that are immersive, intelligent and capable of learning the educational culture in classrooms. The idea of sharing the intimate spaces within which we engage in learning and teaching, raises unique moral questions with equally far reaching cultural implications.

Now consider, users immersed in VR classrooms with the capabilities of machine learning in the near future. The mechanics of an intelligent virtual world would be such that it is constantly learning user preferences based on user choices, concurrently evolving that knowledgebase. IVR classrooms, can potentially transform learning expectations by removing mundane tasks and simulating activities that entice as well as educate in ways that better suit individual learner styles. Such systems would have the ability to learn social norms and habits, by capturing, processing and representing large volumes of spatial, kinesthetic and user generated data. The resulting virtual simulations would be based on predictions tailored to best fit user interests. The levels of accuracy at doing this would foreseeably increase with increased data sources. The result is a virtual classroom that is contextually aware and able to react in relevant time to student and teachers patterns of behavior.

As we face the future, we should critically examine the ethics concerning these concerns and develop technologies in tandem with the moral guidelines that support our espoused values with a view to facilitating learning in future classrooms.

(No. or words: 300)

Key words: artificial intelligence, virtual reality, immersive virtual environments, embodied virtual experiences, virtual classroom, ethics, sociocultural