Engaging Partnerships to Develop a Serious Game to Transform Teaching and Learning

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Purpose: Using a serious game to transform learning and teaching in the Workplace Health and Safety space is an innovative method that addresses the Australian National Safety Standards across a variety of workplace spaces.

Background: All employers in Australia face the challenge of engaging healthcare workers in Risk management training (AIHW 2012).
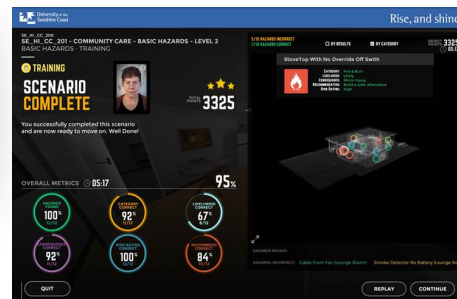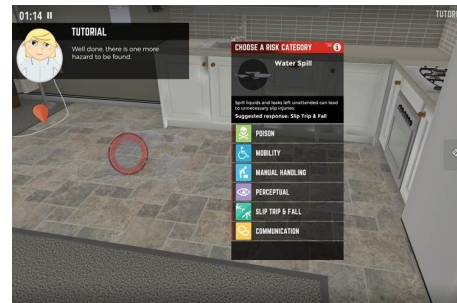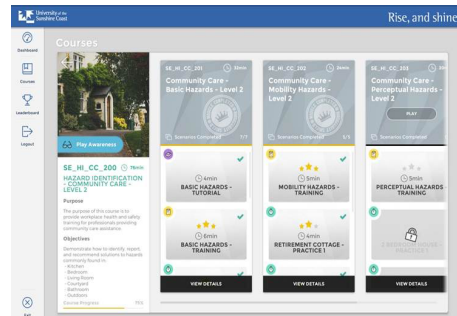
Method: Engaging community partners and their employees assisted in the co-creation and co-design of this application and contributed to the success of the final product. The University of the Sunshine Coast with developers Bondi Labs and Community Industry partner Suncare have developed this serious game.

The Game:
The game is applicable to all levels (family and friends, volunteers, employed carers) and users can develop knowledge and skills in assessing a variety of environments from home healthcare, residential facilities and the acute sector. Players are immersed in a virtual 3D environment exposing them randomly to over 100 hazards representing 11 hazard categories in a variety of environments.. The background provides comprehensive analytics for assessing in depth user behaviour.

Results: The Safe Environment application game provides the opportunity for skills based, competency assessment education to be transformed by means of a choice of virtual interactive environments, featuring tasks such as hazard identification and categorisation; risk identification and risk containment, minimisation and elimination. To pass/win the game the student must achieve 70% and they are provided with feedback about risk identification and management. Staff have access to detailed analytics.
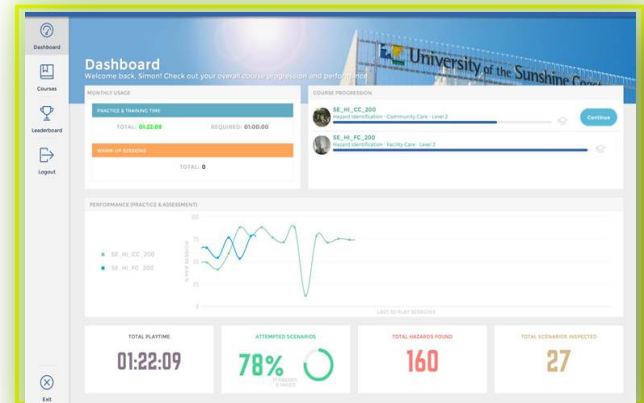
Conclusion: Using Gaming is an innovative approach to teaching however the environment is familiar to most staff and students and assists in stimulating learning. The application was developed with partners and is being used in the training of healthcare workers as part of their mandatory training requirements and now it has being incorporated into the curriculum for the Bachelor of Nursing Science Students and other Faculty of Health programs.

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