Title:

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

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Session Title:

Scientific Posters Session 1

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References:

Australian Institute for Health and Welfare (2012). *Australia's health 2012: in brief.* Cat. No. AUS 157, Canberra: AIHW

Fitzgerald, H. E., Bruns, K., Sonka, S., Furco, A., & Swanson, L. (2012). The centrality of engagement in higher education. Journal of Higher Education Outreach and Engagement, 16(3), 7-28.

Robson, L.S., Stephenson, C.M., Schulte, P.A., Amick III, B.C., Irvin, E.L., Eggerth, D.E., Chan, S., Bielecky, A.R., Wang, A.M., Heidotting, T.L. and Peters, R.H., 2012. A systematic review of the effectiveness of occupational health and safety training. *Scandinavian journal of work, environment & health*, pp.193-208.

Abstract Summary:

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.

Learning Activity:

| LEARNING OBJECTIVES | EXPANDED CONTENT OUTLINE |
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| The Learner will be able to propose the development of an interactive media product for teaching and learning | Using gaming is an innovative approach to teaching and learning and the proposal for the game development will be discussed during this presentation |
| The Learner will be able to discuss how a serious game can engage students critical thinking skills related to Workplace Health and Safety | The Safe Environment application game provides the opportunity for skills based 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. |

| | 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. |
|--|---|
| appreciate the importance of developing community partnerships and working | 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. |

Abstract Text:

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. All employers in Australia face the challenge of engaging healthcare workers in Risk management training (AIHW 2012).

Methods: 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.

Results: The Safe Environment application game provides the opportunity for skills based 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.

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.

Conclusion: Using Gaming is an innovative approach to teaching however the environment is familiar to most staff and students and assists in stimulating learning. This presentation will include how the application was developed with partners and is being used in the training of healthcare workers as part of their mandatory training requirements and how it has been incorporated into the curriculum for the Bachelor of Nursing Science Students.

References:

Australian Institute for Health and Welfare (2012). *Australia's health 2012: in brief.* Cat. No. AUS 157, Canberra: AIHW

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