

## **6C “How To Fail Your Research Degree “: Evaluation of a serious game for postgraduate skills**

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Serious games are games with a purpose beyond entertainment and are widely acknowledged as fruitful tools for learning and skills development across multiple domains, including specifically educational enhancement. ‘How To Fail Your Research Degree’ is a serious game developed to deliver knowledge and understanding of research processes and techniques, within the context of a postgraduate training programme at Glasgow School of Art which guides students transitioning from undergraduate to Masters. Development focussed on encouraging creativity and risk-taking within a safe game environment and learning by (potentially) failing. Intended learning outcomes (ILOs) are to: highlight various risks of research projects and suggest their impact on projects; reinforce dependencies between tasks at different stages of research; directly reinforce the interrelations of different risks with the activities taken to negate or ameliorate them; and replicate the time-critical nature of short research projects. Game characteristics were based on implementation within a postgraduate course and emphasise player agency, working within a time limit, and humour.

Quantitative and qualitative evaluation was performed to provide evidence of the effects of the game within teaching and learning practice. This was achieved through a series of direct interventions in which students (n=66) played the game within a tutorial context and provided feedback. Game effectiveness on meeting the ILOs was evaluated using a 5-point Likert scale. Game experience was evaluated within the theoretical framework of Keller’s Attention Relevance Confidence Satisfaction (ARCS) model. Qualitative data was sought in free text responses. Qualitative data was also collected to assess knowledge retention over time.

Evaluation shows that the game is extremely successful at delivering all of the ILOs and emphatically succeeds at Attention, Relevance, and Satisfaction, with moderate success at increasing Confidence. This serious game is an effective, innovative, and enjoyable complement to postgraduate training on research skills.

### **References**

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