DAEDALUS: AIDING THE AUTHORING PROCESS OF GAME INFORMED VIRTUAL PATIENT CASES

Michael Begg, Rachel Ellaway and David Dewhurst

**Learning Technology Section, Medicine and
Veterinary Medicine, The University of Edinburgh**

The Labyrinth (http://labyrinth.mvm.ed.ac.uk/) authoring and delivery platform for branching content scenarios, currently in development at the University of Edinburgh, has enabled clinicians and teachers to adapt and evolve new strategies for authoring teaching activities such as virtual patients, clinical algorithms and educational mazes. Based upon game-informed learning principles (Begg, Dewhurst et al. 2005) the specific learning objectives of each authored activity necessarily rest within a framework based on narrative and game-like decision-led structures, which in turn afford highly individualised experiences with significant consequential agency. Users feel that they are leading the scenario and that their decisions are making a direct impact upon the outcome of that scenario.

This balance of formal learning requirements with the often deeply complex possibilities for decision making and consequences afforded by the application itself is not something that authors can be expected to acquire without a degree of experience with the processes of authoring compelling educational narratives. Daedalus has been devised by the Learning Technology Section in the University of Edinburgh's College of Medicine and Veterinary Medicine as an authoring aid to finding the most appropriate narrative structure for specific learning activities. Plot structures (e.g. cause and chain effect, Aristotelian tragedy, quest, 3/4 act story arc, etc) are offered as possible outlines based on keyword, concept searches entered by the author. An activity template structure is then generated directly as a Labyrinth, or as an intermediate VUE mindmap (http://vue.uit.tufts.edu/), with integrated assistance for the subsequent development such as furnishing content or developing assessments. The result is a faster and more cognitively aligned way to develop online educational narrative-based activities.

This paper will be of interest to those interested in authoring educational narratives, such as virtual patient cases, those with a general interest in use of narrative in medicine and those with an interest in game-based and game-informed learning

Presenting speaker: Michael Begg, Learning Technology Section, College of Medicine and Veterinary Medicine, University of Edinburgh, George Sq, Edinburgh, UK

E. Michael.begg@ed.ac.uk

Tel +44 (0)131 651 1262, fax +44(0)131 651 3011

W. http://www.lts.mvm.ed.ac.uk/

Begg, M., Dewhurst, D. and Macleod, H. (2005). "Game Informed Learning: Applying computer game processes to Higher Education." Innovate **1**(6).