

## Preface

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This double issue features some significant contributions. Murray, VanLehn and Mostow publish further work on their decision theoretic approach to making choices about tutorial actions based on expected outcomes. This work provides some useful ideas about how to encompass considerations about motivation, affect and so on. It makes an interesting follow on from Reye's work published in the previous issue of the Journal.

Looking more closely at the evaluation of authoring tools, Ainsworth and Grimshaw provide a detailed analysis of the REDEEM authoring environment which has been especially designed for teachers to articulate their approach to teaching. This work results in questions about the design of authoring tools for teachers; in particular, how can systems be designed to help teachers make the most of intelligent systems?

Gulz gives a detailed analysis of the uses of virtual characters in learning systems to increase motivation, communication and personal relationships – as well as to improve learning. One implication of her analysis is that it is crucial that the research community produces virtual characters that are “good enough” in their context to make such environments more than a second best choice for learners when compared with human-human tutoring. Robertson, Cross, Macleod and Wiemer-Hastings provide their own detailed analysis within the context of their work on StoryStation. They compare an agent-enhanced version of StoryStation with one using a more standard GUI. Interestingly, the results are mixed – indicating, again, a need for further work on designing adaptive learning environments.

Britt, Wiemer-Hastings, Larson and Perfetti concentrate on developing an environment to support essay writing by helping students find citable material and integrate this within their essay. Based on a number of techniques for text analysis, the resulting “Sourcer's Apprentice” can be seen as a very positive approach to the problem about how to manage plagiarism in Higher Education. Suraweera and Mitrovic also provide an environment aimed at supporting student's creative activities – in this case, conceptual database design using the Entity-Relationship data model. Their Knowledge-based Entity Relationship Modelling Intelligent Tutor (KERMIT) is another example of the power of the constraint-based modelling approach. Both KERMIT and the Sourcer's Apprentice are examples of systems that use fairly simple feedback management – and therefore there is excellent potential for further development.

To maintain the current high quality of papers accepted, I encourage all who work in the area covered by the Journal to submit research papers to myself, the Editor-in-Chief.

Paul Brna