Preface

2006 promises to be an excellent year for the International Journal of Artificial Intelligence in Education. In addition to the papers in this issue, there are some valuable contributions in the next issue based on well respected work presented at ITS 2004, an issue encouraging reflection on some key ideas in the field for 16(3) and then a special issue on Learner Centred Methods for Designing Intelligent Learning Environments due at the end of the year.

There are three papers in this issue, all with some connection with interactive dialogue. The paper by Sidney D'Mello and his colleagues examines dialogue with a special interest in whether or not we can estimate the affect present in the author of the text. This raises an attractive prospect when compared with the invasive techniques of some approaches to assessing affect. If we could only reliably predict affective states from patterns in dialogue then there would be the prospect of a significant improvement in the nature of intelligent learning environments. This paper provides both a methodology based on an "emote-aloud" approach and some useful results. The problems with the methodology are sketched well and the results certainly suggest some useful lines of future enquiry.

The paper on constraint based modeling by Wolfgang Menzel takes a hard look at how well the 'standard' approach manages different kinds of ambiguity. The analysis is based on a detailed examination of language teaching and the diagnosis of student errors. The proposed solution, based on defeasible constraints, certainly provides interesting ideas for those wanting to develop constraint based modeling approaches.

Lisa Michaud and Kathy McCoy outline the achievements of their long-term research programme to develop ICICLE, a Computer-Assisted Language Learning (CALL) environment. ICICLE utilises computational linguistic techniques to teach English as a second language in terms of the grammatical aspects of the learner's writing. The paper particularly examines how this system can be used to help deaf students – in part, by representing a learner's internal grammar as it changes over time.

The issue can be seen as three different approaches to asking the question "what can we infer about the learner from their textual input"? A familiar question to the readers of this journal, and some interesting (partial) answers.

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