Preface

This last issue for 2007 contains three papers each of which addresses a significant, and perennial, question for IJAIED readers: how do we take the individual learner's cognitive, affective and attitudinal factors into account for improving lesson design, for helping learners and for designing more effective tutors.

Ryan Baker, Albert Corbett and Ken Koedinger explore a design method which they term the "difficulty factors approach" in their paper on "The Difficulty Factors Approach to the Design of Lessons in Intelligent Tutor Curricula". Their method is iterative, and is illustrated through the development of a cognitive tutor for scatterplots. This work makes a useful contribution to the range of techniques available for building improved ITSs. This is promising work which might usefully be explored further by combining it with design processes that take affective and motivational issues into account.

Yanghee Kim provides an evaluation of some of the characteristics of agents that are considered to be desirable in her paper on "Desirable Characteristics of Learning Companions". The core idea behind this work is an exploration of the ways in which the agent's characteristics can have a positive or negative influence on the kinds of outcomes that we would like – such as improved self efficacy and learning. There are indications that the relationship that is eventually held between the agent and the learner has a powerful effect. While the agents are mainly scripted, this paper provides yet further information about the ways in which pedagogical agents might be designed.

Anita Ferreira, Johanna Moore and Chris Mellish's paper on "A Study of Feedback Strategies in Foreign Language Classrooms and Tutorials with Implications for Intelligent Computer-Assisted Language Learning Systems" provides a detailed analysis of two kinds of feedback strategy followed by teachers – Giving-Answer Strategies (GAS) and Prompting-Answer Strategies (PAS). As a result of this research, several future strands of work are identified that deserve following up.

Volume 17 has featured an excellent set of papers including the two issues devoted to Open Learner Modelling. The set of papers for 2008 that is likely to be published looks equally stimulating, once again demonstrating the international scope of IJAIED.

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