



OXFORD UNIVERSITY CENTRE FOR EDUCATIONAL ASSESSMENT

Learning and Assessment with Conversational Agents and Automated Measurement of Text Characteristics

Professor Arthur Graesser, University of Memphis

Wednesday 27th November at 12.45 in Seminar Room A

Abstract

Pedagogical agents with conversational dialogue are becoming more popular in today's computer learning environments and are beginning to be used for assessment. This is possible because the intelligence of the knowledge tracking, computational linguistics, conversational moves, and other features of these agents has been improving over the last decade. This presentation describes some of the agent-based learning and assessment systems we have been developing during the last 15-years, including AutoTutor and Operation ARA. These systems cover language learning, comprehension, and a variety of subject matters in STEM (Science, Technology, Engineering, and Mathematics). The presentation also describes Coh-Metrix, a computer system that analyzes texts on multiple measures of language and discourse: formality, genre, cohesion, syntax, and word concreteness.

Professor Graesser is a professor in the Department of Psychology, an adjunct professor in Computer Science, co-director of the Institute of Intelligent Systems at the University of Memphis, and Honorary Research Fellow at OUCEA. Prof. Graesser's primary research interests are in cognitive science, discourse processing, and the learning sciences. More specific interests include knowledge representation, question asking and answering, tutoring, text comprehension, inference generation, conversation, reading, principles of learning, emotions, artificial intelligence, computational linguistics, and human-computer interaction.

DIRECTOR: Professor Jo-Anne Baird

Department of Education, 15 Norham Gardens, Oxford, OX2 6PY, UK

Phone: +44 (0) 1865 274002/284098 Fax: +44 (0) 1865 274027

Website: <http://oucea.education.ox.ac.uk/> Email: admin.oucea@education.ox.ac.uk