

Multi-Agent Architecture for Social Learning

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Transformed Social Interaction (TSI) enhanced Pedagogical Agents to Engage Learners in QuizMASt educational game

- *Self-representation* – morphing of real faces into the avatars

Generic pedagogical agent: Stephen

User 1: Oscar's face

Transformed face of the pedagogical agent that Oscar will see in the virtual world

40:60 =

User 2: Steve's face

Transformed face of the pedagogical agent that Steve will see in the virtual world

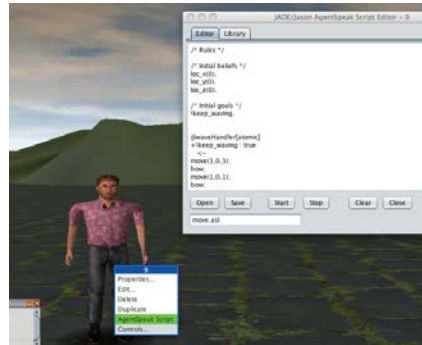
- *Sensory ability*
- *Situational context*

Multidisciplinary Research

Incorporate "affective computing" techniques and "agent autonomy" into "affective agents" with emotions, personality, affective decision making and make VWs more believable, usable and effective.

Project Goals

- Explore the use of intelligent agents to perform tasks in a 3D virtual environment
- Create an integrated framework to simplify the process of creating JADE and Jason agents to control both NPC and regular cells in Open Wonderland
- Focus on exploring the use of intelligent agents to perform game-based activities to assist in user learning
- Investigate conceptual frameworks, and design models, pedagogical design guidelines and heuristics for agent-based immersive learning environments



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