

## **Communication & relationship building - Working group**

### **ICT Workshop on Intelligent Lifelong Learning Companions**

October 2-3, 2008

#### Summary

It's difficult to imagine a lifelong learning companion being successful without effective methods of communicating with or "getting to know" the learner. The links between communication, being understood (in both directions), and building a sustainable relationship is the focus of this working group. These are general problems that researchers in dialogue systems and embodied agents are addressing. Interacting with a learner, especially novices, may impose additional barriers on these already complex problems. For example, it is often difficult to establish common ground with learners when they lack the necessary background knowledge to comprehend an utterance. Also, *how* feedback is delivered can have a profound impact on a learner's confidence and general feelings about an intelligent agent. This working group should focus on the link between communicative actions, emotional states, and learning, and discuss their impact on learning over the long haul.

#### Participants

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#### Potential discussion questions

- What are the measures of rapport and relationship building that would matter most to a lifelong learning companion?
- Getting "close" to someone can also mean occasionally being upset or arguing – does it make sense to provide this functionality to a lifelong learning companion? Could it be used to engage the learner and motivate them to outwit or one-up the companion?
- What are the connections between emotion and learning? Are there times when learners are most "ready" to learn in specific ways?
- The Primer in the Diamond Age is actually more like a computer than a human – would it be more effective with some personality? Or would that get in the way in terms of its teaching effectiveness?
- What domain independent properties of a learner would be most useful to apply across domain and different situations with a lifelong learning companion?
- What is the current state of open-ended question answering? Mixed-initiative interaction was once believed to be an important goal for tutoring systems – should this question be revisited?