

Stefanie Tellex

Week 9

Azmitia, M. "Peer interaction and problem solving. When are two heads better than one?" I thought this paper was pretty interesting. The fundamental result matches my intuition, that a kid learns more from a talented peer than a less talented peer. It would be interesting to compare whether talented kids paired with another talented kid was faster than a talented kid and a slower kid - sort of how much working with a less talented kid holds the talented one back. For children to learn from a machine, they would have to have the perception that the machine was better at the task than they were - the machine would have to appear competent. I wonder how little things, like the speed and smoothness of picking up blocks will affect the child's perception of competence. You could test this with humans by finding smart but physically handicapped kids who maybe can't pick up blocks as smoothly and see if they have the same effect on less talented kids as normal kids.

S. Jackson, J. Kracik, E. Soloway "The design of guided learner-adaptable scaffolding in interactive learning environments" Scaffolding that fades away risks violating the user's expectations. If they are used to the software behaving a certain way, and that suddenly changes, they might not know how to operate without it, and get frustrated and confused. For my part, I think I'd much prefer an interface that never changed, that I could get used to than one that adapted, and then broke my keyboard shortcuts and forced me to learn new habits. So I strongly agree that the scaffolds should be under the learner's control, at least at this stage in human computer interaction. At the very least when scaffolds are removed the learner should know about it and be able to override it.

They should say how the focus group of 11 was chosen. The "misfeature" of not being user-specific seems like a major mistake. If the point of this is to study the system over time, the system should really remember their preferences. It might also be an interesting thing to vary - remember preferences for some students and not for others and see if they turn it back on as the project changes or something.

In reporting how frequently things were faded, they should quantify how often they were invoked. They probably didn't record that data, and so can only present qualitative results... too bad. They could estimate "probability feature X will be faded" or something.

Winslow Burleson, Rosalind Picard "Affective Agents: Sustaining Motivation to Learn Through Failure and a State of "Stuck""

Numblypoles probably isn't a good game to play as a way to distract kids. To see if the higher level meta stuff is helping, the alternate game should have nothing to do with the first one. They could compare that to numblypoles alone, and to numblypoles with meta-frustration help. Otherwise the help could come from simply increased familiarity with the problem; there could be less frustration because they have less reason to be frustrated, rather than because they have learned to deal with it better.

Where was this published? Is this a proposal for a grant, or a published paper?

Tim Bickmore and Roz Picard, 2004. "Establishing and Maintaining Long-Term Human-Computer Relationships"

Why didn't we read this paper first thing? It seems pretty core to the field... I really think this paper should have been presented earlier. It gives a really good concise overview of a lot of what we've talked about. I would have liked to read it first, to have a high level overview of where we are going.

Their description of Clippy is awesome.

The example dialogs from Laura include one free-form one. The user told about the college she went to and stuff, which seemed like it must have been typed in, but they don't say anything about that in the paper.

They should have filtered out subjects who were already exercising 30 minutes a day before the study started...

It's especially interesting the drop-off was greater for subjects in the relational group than the non-relational group. Maybe they felt a greater sense of betrayal because the system had appeared more like a human.

The idea of "relational agent spam" is kind of scary. Imagine adware that installed an agent. It pops up one day, becomes your friend with the express purpose of getting you to help out his friend who wants to transfer some money from Nigeria and needs your help. It steals your computer's processor cycles in order to build a relationship with you, and then exploits you.