What can Bootstrapped Learning Tell us about Lifelong Learning Companions?

Candy Sidner
BAE Systems AIT
Bootstrapped Learning

• Goal is to provide human instruction to an electronic student.

• This project is the opposite of a lifelong learning companion (who teaches a human)!

• So

  What can we learn from BL that will inform Lifelong Learning Companions?
First, a bit about the BL project....
Claim: a Bootstrapped Learner

• Has some of the prerequisite skills for a lifelong teacher:
  – Knows how to do certain tasks;
  – Able to use input from the world around it (albeit in limited ways)
  – (Will) have some knowledge of conversing in a human language.
Bootstrapped Learners

• Use learning algorithms so that they may be instructed by a human;
• Maintain underlying representations needed for instruction;
• Have knowledge that in theory should be expressible in English;
• Learn by observation as well as instruction and hence can observe the human learner’s needs.
Questions and Comments