Adaptive Learning Environments – SSS1

Meta review of Of Kopp, Kristopher J, M Anne Britt, Keith Millis & Arthur C Graesser. 2012. Improving the efficiency of dialogue in tutoring. Learning and Instruction 22(5). 320–330.

1. Evidence on contribution of paper

- Worth being studied: time to be saved
- Cited empirical evidence of time spent on task
- Hypothesis 1 derived from previous research

2. Clarity of research questions

- Clearly posed research questions
- Good description of experimental setup

3. Methods and their explanation

- Experiments fit the research questions
- Some flaws of experiment 1 were controlled for in experiment 2
- No evidence for non-significance of frequency of within-subject variable

4. Conclusions based on data

- In-depth analysis of result
- Sensible interpretation of experiments' results

5. Explanation of the implications of the work

• Clearly referring to previous research in which it aims to fill gap

6. Limited understanding and ways to provide better comprehension

- Within-task switch of dialogue amount may have been useful
- Statistical analysis may be unusual for readers of several disciplines, but common in experimental research papers
- Title of paper refer to efficiency of dialogue in tutoring, but main theme seems to be the frequency of guided tutoring

7. Notably convincing parts

- Clear introduction and conclusion
- Introduction of reverse condition in experiment 2 was very helpful for further understanding
- Defining an efficiency score, standardized throughout experiments, was useful