Case study #2: The Middle School Science Project

A brief summary of this case study is that Cynthia asked Denny to provide suggestions and method for the local middle school science teachers to teach the students with an innovative constructivist approach. It should focus on the problem-solving process rather than the learning outcomes. The key is to provide opportunities for teachers to "explore issues related to reform-based science teaching" in a "socially supportive" environment (Eetmer & Quinn, 2006).

I choose the anchored instruction in this case study for the following reasons. Firstly, it is one of the most effective ways to develop a "socially supportive" environment. With the given anchor, the students will be more engaged with the topic and perform more active in class discussions so that the socially supportive environment has a great beginning. Secondly, authentic is a remarkable feature of anchored instruction, and the authentic "macrocontexts" for classroom discussion and problem solving were proven useful as instructional strategies (Cognitive and Technology Group at Vanderbilt, 1990). Besides that anchored instruction is a technology-based learning approach which stresses the importance of placing learning within a meaningful, problem-solving context. Last but not least, an anchored instruction activity supports learning opportunities that relate to and extend thinking to other content areas. All of the above meet the needs Cynthia mentioned that to explore issues related to reform-based science teaching in a socially supportive environment.

There're two Cmaps in the Case Study #2, one is a concept map of the case, the other one is under the "Anchored Instruction" which shows the strategies can be used in the process. Furthermore, in this Cmap, it also points out the effect of each step. They are exactly following Cynthia's purpose of this project. What I want to emphasis is the last step "Evaluation". It is for the teachers to evaluate the strategies being used but not for evaluating the students' learning outcomes. However, teachers have to examine their teaching strategies according to the students' feedback based on their problem-solving skills.

References

Ertmer, P. & Quinn, J. (2006). The ID casebook-case studies in instructional design. NJ:

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Cognitive and Technology Group at Vanderbilt. (1990). Anchored instruction and its

    relationship to situated cognition. *Educational Researcher, 19,* 2-10.