Explanation Prompts

Theory

Explanation prompts are an instructional aid which promotes understanding of the learned material and **conceptual knowledge** by requiring the learner to elaborate on the step of a procedure he has just learned about.[1]

Two possible explanations were offered for this effect: first, claiming the enhanced learning result is caused merely by being exposed to additional information and that result would be the same if learners were offered teacher-provided explanations, and second, claiming the enhanced learning result is caused by the process of generating explanation from learner's own background knowledge. A recent research has supported the second hypothesis, suggesting that

- "*the important variable for learning was the **process** of producing an explanation.*"[2]

Practice

Research status

[1]
Berthold, Kirsten, Tessa H. S. Eysink, and Alexander Renkl. Assisting self-explanation prompts are more effective than open prompts when learning with multiple representations. Instructional Science 37: 345-363, April 2008.
[2]
Hausmann, R. G. M., & VanLehn, K. Explaining self-explaining: A contrast between content and generation. In R. Luckin, K. R. Koedinger & J. Greer (Eds.), Artificial intelligence in education: Building technology rich learning contexts that work, vol. 158, pp. 417-424. Amsterdam: IOS Press, 2007.