

The Transfer of Problem-Solving Skills From a Problem-Based Learning Environment: The Effect of Modeling an Expert's Cognitive Processes

Abstract

This study examined students' transfer of strategies modeled during a problem-based learning (PBL) unit to a novel problem situation. A hypermedia-based tool offered video segments of an expert as he engaged in the same tasks as students during PBL. Three conditions were compared. In the modeling condition, the expert "thought aloud" as he engaged in the same tasks as students. In the didactic condition, the expert gave tips and examples of how to work effectively. In the help condition, the expert explained tool functionality but did not provide support for problem solving. The results suggest that the modeling condition provided the most effective support, and that modeling an expert's cognitive processes during PBL leads to improved performance on a transfer task.