

Data Flow Diagramming Skills Acquisition: Impact of Cooperative versus Individual Learning

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ABSTRACT

Information systems (IS) process modeling using the technique of Data Flow Diagramming (viz., Systems Analysis) can be defined as a complex task for IS designers. This study draws from the domains of educational psychology and organizational behavior in examining the training of novices in conceptual process modeling. Specifically, an experiment was conducted to determine what effects cooperative, team based participation has on self-efficacy and learning outcomes in dataflow diagramming (DFD) tasks. Results showed novice learners of DFDs performed better when working in cooperative teams rather than learning alone. For those learning in cooperative teams, neither team conflict nor team cohesion had any effect on DFD skill acquisition.

Keywords: Data flow diagrams, Systems analysis and design, Learning style