The management of cognitive load during complex cognitive skill acquisition by means of computer-simulated problem solving

Liesbeth Kester, Paul A. Kirschner and Jeroen J. G. van Merriënboer
Educational Technology Expertise Centre, Open University of the Netherlands

This study compared the effects of two information presentation formats on learning to solve problems in electrical circuits. In one condition, the split-source format, information relating to procedural aspects of the functioning of an electrical circuit was not integrated in a circuit diagram, while information in the integrated format condition was integrated in the circuit diagram. It was hypothesized that learners in the integrated format would achieve better test results than the learners in the split-source format. Equivalent-test problem and transfer-test problem performance were studied. Transfer test scores confirmed the hypothesis, though no differences were found on the equivalent-test scores.

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