

An eye-tracking study of how color coding affects multimedia learning

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Abstract

Color coding has been proposed to promote more effective learning. However, insufficient evidence currently exists to show how color coding leads to better learning. The goal of this study was to investigate the underlying cause of the color coding effect by utilizing eye movement data. Fifty-two participants studied either a color-coded or conventional format of multimedia instruction. Eye movement data were collected during the study. The results indicate that color coding increased retention and transfer performance. Enhancement of learning by color coding was due to efficiency of locating corresponding information between illustration and text. Color coding also attracted attention of learners to perceptually salient information. (C) 2009 Elsevier Ltd. All rights reserved.