Four reading ability tests as predictors of multimedia document comprehension

DESIRON, Juliette, BETRANCOURT, Mireille, DE VRIES, Erica
Four reading ability tests as predictors of multimedia document comprehension

Juliette C. Désiron¹, Mireille Bétrancourt¹ & Erica de Vries²
¹TECFA, Université de Genève, Switzerland
²LSE, Univ. Grenoble Alpes, France
{Juliette.Desiron, Mireille.Betrancourt}@unige.ch
Erica.deVries@univ-grenoble-alpes.fr

Abstract

Although research on learning from multimedia documents acknowledges the importance of learners’ text comprehension ability, there is scarce investigation on how students’ reading abilities affect learning outcomes. In this study, pre-vocational students (N = 54) took four standard reading ability tests (vocabulary, fluency, inference and general literacy) and learned about the evolution of cocoa with a 6-page text-picture document in one of two versions (high vs. low cohesion level). Then they completed a post-test questionnaire for three levels of comprehension (text-based, local bridging inference, global bridging inference). Cohesion had no impact on any comprehension level and therefore the results for the two conditions were collapsed. Correlation analyses at the three outcomes levels showed significant correlations for all test scores except fluency which was removed from further analyses. A multiple multivariate regression analysis showed that the model with the three test scores significantly predicted comprehension performance but that only vocabulary scores significantly added to the model at the three levels of comprehension.