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Integrating in Interleaved Conflicting Documents: Content Preference and Epistemic Beliefs Matter

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Abstract

This study investigated the effect of interleaving and epistemic beliefs on the reading comprehension of multiple conflicting documents. Especially, it is assumed that interleaving may highlight the differences between documents through the discrimination and contrasting of the conflicts, thus improving the integration of information. A one-factor experiment was conducted (n = 179) to compare the effect of interleaving against spacing and blocking on reading comprehension. In addition, a mediation model was established based on the Documents Model Framework. Path analysis results indicated that interleaving influenced integration through germane cognitive load and viewpoint description. Whereas spacing facilitated source-content links through source memory but showed no influence on integration. Furthermore, epistemic belief moderated the effect of interleaving on germane cognitive load. Participants with high level of justification for knowing reported the lowest germane cognitive load in the interleaved condition. Potential mechanism of interleaving in multiple document reading was discussed.