Cognitive resource allocation to lower-level linguistic processing and higher-level conceptual processing in EFL reading: The role of strategy instruction

Yukino Kimura
Dokkyo University, Japan

Compared to first language (L1) readers, second language (L2) readers have difficulty allocating limited cognitive resources to higher-level conceptual processing (e.g., inference generation, knowledge activation) because lower-level linguistic processing (e.g., lexical and syntactic analyses) is less automatized (Horiba, 1996; Rai, Loschky, Harris, Peck, & Cook, 2011). Due to such cognitive demands, L2 readers often concentrate on constructing a surface-level and textbase-level representation rather than a discourse-level representation of a text (Morishima, 2013).

This study investigated the effects of strategy instruction aimed at the construction of a discourse-level mental representation of texts, on cognitive resource allocation during reading in a foreign language. Thirty Japanese university students read four short English narrative texts using a think-aloud method. They read two texts in order to answer comprehension questions (normal instruction) and two more texts after being instructed to think about the author’s message conveyed through the overall texts as they read (strategy instruction).

The results demonstrated that the participants produced significantly more comments including lexical and syntactic analyses after the normal instruction compared to the strategy instruction. Furthermore, the more proficient learners were, the more inferences they generated under the strategy instruction. These results suggest that while strategy instruction helps learners distribute cognitive resources to higher-level processing, proficient learners tend to take greater advantage of the instruction than less proficient learners.


Keywords: written comprehension, L2 reading, instruction.