

Improving reading: Understanding the role of working memory and ease of inference generation

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Reading scores from the National Assessment of Educational Progress showed 24% of Kansas' fourth grade public school students were below basic reading levels. This shows there is a significant need for researchers to understand the different strategies readers use to successfully comprehend a text. An important skill for understanding texts is being able to fill in missing information from the text; this is called a bridging inference. When there is a coherence break in a text, readers will generate bridging inferences, but this can cause processing delays. This study examined whether the ease with which the bridging inferences could be generated is related to how difficult it is to generate the inference. Thus, participants in the current experiment read several passages in which the ease of generating an inference was gradually decreased by manipulating the explicitness of an action. Reading times for target sentences that followed the critical sentences increased as explicitness decreased. In addition, reader skills, such as working memory capacity, are related to inference generation skills. The effect of explicitness was more pronounced in readers with high working memory. This provides preliminary evidence that processing delays during bridging inference generation are affected by ease of generation. Understanding the types of processing, such as bridging inferences, that can improve comprehension among readers of all ages is critical for helping struggling readers in Kansas succeed.