MAKING MEANING STICK: THE POWER OF VOCABULARY NETWORKS

ARTICLE

Mosher, D. M., Burkhauser, M. A., & Kim, J. S. (2024). Improving second-grade reading comprehension through a sustained content literacy intervention: A mixed-methods study examining the mediating role of domain-specific vocabulary. *Journal of Educational Psychology, 116*(4), 550-568.

WHAT DID THEY DO?

In this study, researchers examined the impact of first- and second-grade students' content-specific vocabulary knowledge on reading comprehension after participating in a content literacy intervention, the Model of Reading Engagement (MORE). The study included students who either received the intervention for two consecutive years or the district's science and social studies curriculum. Each intervention unit included 12 target vocabulary words - seven words were taught explicitly through a concept map (Grade 2 unit on paleontologists - extinct, fossil, brutal, evidence, theory, hunter, paleontologist) and the other conceptually-related words were taught indirectly (carnivore, hypothesis, organism, trait, reptile). Following the intervention, students had to identify two words related to each target vocabulary word. Second-grade students completed a reading comprehension measure to assess their ability to transfer their learning to new passages.

WHAT DID THEY FIND?

Researchers found that first and second-grade students' domain-specific vocabulary knowledge accounted for 69% of the intervention's effect on reading comprehension outcomes. There were significant differences in first-grade vocabulary knowledge between the intervention and control groups. Researchers also found that teachers engaged in practices to make word meanings more accessible to students, such as expanding opportunities for students to use words, connecting words to topics, and continuing intervention practices in later instruction.

Intervention lesson structure

Key vocabulary words were introduced in all lessons and added to the interactive class concept map

Lesson 1- Build student interest on the topic
Lesson 2- Build background knowledge through read-aloud
Lesson 3- Represent key vocabulary using a concept map
Lesson 4- Extend background knowledge through read-aloud
Lesson 5- Capture key conceptual knowledge through targeted note-taking
Lesson 6- Examine concept map words through inquiry to build morphological awareness
Lesson 7- Answer a research question in collaborative groups using grade-level texts, discussion, and writing

WHAT COULD THIS MEAN?

- Vocabulary instruction that helps students build connections between related words and concepts (rather than teaching words in isolation) allows students to better organize and retrieve knowledge when encountering new concepts
- It takes time for students to build background knowledge by learning networks of content-specific vocabulary
- Concept maps, incidental exposure, and language extension make vocabulary more accessible to students by providing context, building word and concept connections, and teaching words in networks

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