

WHAT WORKS?

Research into Practice

A research-into-practice series produced by a partnership between the Literacy and Numeracy Secretariat and the Ontario Association of Deans of Education

Research Monograph # 27

Why is word study important and how should it be taught?

Word Study Instruction

Enhancing Reading Comprehension

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Word study instruction can provide students with vital knowledge which they can then apply to the task of comprehending text. The nature of word study will vary with the developmental needs of students and the demands of the text. A teacher's knowledge of the structure of English is an important factor in optimizing word study instruction; equally vital is the ability to present the study of spelling, vocabulary and word choice in a manner that engages students and entices them to explore words on a deeper level.

Recent Approaches to Word Study

Reading is a complex process that requires the learner to interact with print on many levels. It has long been acknowledged that effective word recognition skills are fundamental to proficient reading.¹ Efficient processing at the word level frees the reader to engage in higher order comprehension skills, such as making inferences about text, making connections and asking questions.² Word study addresses not only word recognition, but also vocabulary, spelling, word-level grammatical concepts and effective word choice. These areas work in tandem to help learners develop into mature readers.³

There has been much debate surrounding the teaching of word study, particularly with respect to word recognition and spelling. Recent approaches stress the need to create a balance between planned, focused lessons on specific aspects of word knowledge and spontaneous opportunities to address words throughout the school day.⁴ Teachers are encouraged to promote transfer of word knowledge through cross-curricular connections, with a focus on engaging students in activities that promote a deeper understanding of the function of words in all aspects of their lives. This includes word play and a critical stance toward the use of words in various media.

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Research Tells Us

- Vocabulary, spelling, word-level grammatical concepts and effective word choice work in tandem to help learners develop into mature readers.
- Vocabulary knowledge is one of the best predictors of reading comprehension.
- Focused spelling instruction has also been shown to have an impact on reading comprehension.
- Spelling instruction has an impact on the quality of student writing, but also helps students understand how words work at the level of sound, structure and meaning.

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Effect of Vocabulary Knowledge on Reading Comprehension

Vocabulary knowledge is one of the best predictors of reading comprehension.⁵ Among first and second grade students, reading comprehension can be predicted to a large extent by vocabulary, letter recognition and phonemic awareness.⁶ Vocabulary knowledge also promotes reading fluency, improves academic achievement and enhances thinking and communication.⁷ Differences of 4,000 words have been observed between the root vocabularies of Grade 2 children in the highest and lowest vocabulary quartiles.⁸ These gaps, which are often found when comparing economically advantaged and disadvantaged children,⁹ begin in preschool and persist through the school years. Effective vocabulary instruction, beginning in the early years, could therefore have a significant impact on a child's academic future.

Vocabulary instruction must, however, go beyond the level of simple word definitions. Students should be presented with multiple opportunities to explore new words and concepts across the curriculum, and be guided to attend to word structure, the multiple meanings of words and the connotations often attached to words. For example, knowledge of prefixes and suffixes can be applied to the understanding of mathematical terms such as *triangle* and *bisect*, and to social studies words such as *triumvirate*. Students should also become critical readers in all subject areas and be aware of the influence of word choice on readers. News sources, for example, can be examined for the use of emotionally charged words that reflect a particular bias. Wide reading is a major source of word learning¹⁰ and students at all grade levels should be exposed to both fiction and non-fiction materials in a variety of genres and text forms.

Vocabulary instruction should also include an examination of word choice. Even children in the early grades can begin to appreciate the effectiveness of descriptive words, including strong nouns and verbs and adjectives that appeal to the senses. Students at all grade levels should have fun with words. Riddles and puns can teach young children important concepts, such as the multiple meanings of words and word features.

Effect of Spelling on Reading Comprehension

Focused spelling instruction has also been shown to have an impact on reading comprehension. Roberts and Meiring examined the effects of first grade spelling instruction on fifth grade reading comprehension. A significant advantage was noted in reading comprehension for fifth grade students who, in first grade, received phonics instruction through spelling as opposed to informally through literature.¹¹

As students progress in their spelling development, they also need to develop morphological awareness. Morphology refers to how words are structured, including base words, prefixes, suffixes, plurals, possessives, past tense markers, etc. Reed found that morphological awareness makes a significant contribution to reading comprehension for children in Grades 4 through 9.¹²

Theories of Spelling Development

The shift to an emphasis on morphological awareness in late primary and early junior grades is consistent with stage theories of spelling development.¹³ Cognitive developmental research suggests that students begin their explorations of the spelling system of English by focusing on the sound level of language.¹⁴ Phonological awareness and phonemic awareness help students to map the sounds of English with the letters representing those sounds. As this knowledge is consolidated, students are able to probe more abstract levels that involve morphology. Morphological knowledge may begin with simple concepts such as markers to indicate plural forms, and then develop over several years to include sophisticated knowledge of derived forms, such as *human/humane/humanity/*

Word knowledge has long-standing effects ...

“Many children graduate high school with little change in their level of awareness [of language], leaving them unprepared to manage the effects language has on them and on others.”

Peter Johnson¹⁷

“Differences of 4,000 words have been observed between the root vocabularies of Grade 2 children in the highest and lowest vocabulary quartiles.”

Word Study in Action

Classroom vignettes that illustrate language and word study
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inhuman/humanist. Stage theory focuses on the consistent patterns in language, and views learners as pattern-seeking beings. Learners, then, can employ their understanding of sound or morphological patterns in known words to recognize unfamiliar words when listening or reading; this knowledge can then be applied to using these words accurately when speaking or writing.

Proponents of the “overlapping waves” theory of spelling growth¹⁵ describe spelling development in terms of strategies employed by children. They have found that children possess a range of spelling strategies they apply throughout their development, but they tend to shift their reliance to different strategies over time. Younger children, for example, may use predominantly phonological strategies, but may also use morphology when needed. Therefore, instruction in multiple strategies is appropriate for even the earliest spellers.¹⁶

As students mature, they are able to apply the appropriate strategies for the context. These word level skills promote development in spelling, reading and vocabulary knowledge.

Spelling instruction, therefore, not only has an impact on the quality of student writing, but also helps students understand how words work at the levels of sound, structure and meaning. This knowledge can then be applied to enhance vocabulary and reading comprehension.

Implications for Classroom Practice

Word study should be integrated into the literacy program in a planned, consistent manner. Focused attention should be placed on word recognition, vocabulary development and spelling.

- Provide instruction in spelling patterns and strategies based on needs identified through student writing.
- Explore words through modeled, shared, guided and independent formats.
- Expose students to a wide variety of print and non-print materials, in both fiction and non-fiction forms.

Instruction in word study should respect the developmental nature of reading and spelling acquisition.

- Place a greater emphasis on sound patterns in the early grades.
- Gradually transition to the study of multi-syllabic words, word structure and word origins in later years.
- Examine new words in a number of ways throughout the day to address a variety of learning styles. For example, a word may be encountered in a story, discussed as a class, examined for its multiple meanings and used throughout the school day in a variety of subject areas.

Concepts related to word study should be applied to content area subjects throughout the school day.

- In music, examine base words and related forms such as *music*, *musical*, and *musician*.
- In mathematics, contrast everyday and specialized meanings of words such as *plane*, *face*, *mean*, *net* and *expression*.
- In science, apply common Greek and Latin roots to understand terms such as *photosynthesis*. Compare and contrast concepts such as *translucent* and *transparent*, using graphic organizers such as Venn Diagrams to point out similarities and differences.
- In social studies, examine texts and research sources for word choice that suggests bias or non-inclusive language.

Implications for Practice

Tips for Classroom Teachers

- Word study should be integrated into the literacy program in a planned, consistent manner.
- Instruction in word study should respect the developmental nature of reading and spelling acquisition.
- Concepts related to word study should be applied to content area subjects throughout the school day.
- Children should be actively involved in exploring how words work.
- Teachers should continue to acquire knowledge of linguistics, developmental stages of spelling growth and instructional practices that enhance word knowledge among students.

“When readers do not have to labour over decoding and recognizing new words, they are able to interact with text at a deeper level, freeing them to connect with the writer’s message in creative and thought-provoking ways.”

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Children should be actively involved in exploring how words work.

- Use word sorts to classify words into various patterns. For example, divide base words into groups that form plurals in different manners.
- Model strategies for spelling the tricky features of words.
- Have students brainstorm effective memory clues for recalling frequently misspelled words.
- Encourage students to reflect on word choice when reading and consider audience, form and purpose when choosing words in their writing.

Teachers should continue to acquire knowledge of linguistics, developmental stages of spelling growth and instructional practices that enhance word knowledge among students.

- Use professional learning communities to share understandings about words and to identify common professional needs.
- Employ job-embedded professional development to translate theory into word study practice.
- Use teacher moderation to create common understandings of assessment in word study and identification of student needs.

In Sum

Helping students to “know words” through engaging and well-designed word study is important in promoting growth in reading comprehension. Gains in vocabulary, spelling, and sensitivity to word choice all work toward more efficient language processing. When readers do not have to labour over decoding and recognizing new words, they are able to interact with text at a deeper level, freeing them to connect with the writer’s message in creative and thought-provoking ways.

REFERENCES

1. Stanovich, K., Nathan, R., West, R., & Vala-Rossi, M. (1985). Children’s word recognition in context: Spreading activation, expectancy, and modularity. *Child Development*, 56, 1418–1428.
2. Harvey, S., & Goudvis, A. (2007). *Strategies that work: Teaching comprehension for understanding and engagement*. Portland, ME: Stenhouse.
3. McQuirter Scott, R. (2008). *Knowing words: Creating word-rich classrooms*. Toronto, ON: Nelson Education.
4. Moore, D., Moore, S., Cunningham, P., & Cunningham, J. (1998). *Developing readers and writers in the content areas K–12*. New York, NY: Longman.
5. Richek, M. (2005). Words are wonderful: Interactive, time-efficient strategies to teach meaning vocabulary. *The Reading Teacher*, 58, 414–423.
6. Aarnoutse, C., van Leeuwe, J., & Verhoeven, L. (2005). Early literacy from a longitudinal perspective. *Educational Research and Evaluation*, 11, 253–275.
7. Bromley, K. (2004). Rethinking vocabulary instruction. *The Language and Literacy Spectrum*, 14, 3–12.
8. Biemiller, A. (2004). Teaching vocabulary in the primary grades: *Vocabulary instruction needed*. In J. Baumann & E. Kameenui (Eds.), *Vocabulary instruction: Research to practice* (pp.28–40). New York, NY: Guilford Press.
9. Blachowicz, C., Fisher, P., & Ogle, D. (2006). Vocabulary: Questions from the classroom. *Reading Research Quarterly*, 41, 524–539.
10. Cunningham, A.E., & Stanovich, K.E. (1998). What reading does for the mind. *American Educator*, 2, 8–17.
11. Roberts, T., & Meiring, A. (2006). Teaching phonics in the context of children’s literature or spelling: Influences on first-grade reading, spelling, and writing and fifth-grade comprehension. *Journal of Educational Psychology*, 98, 690–713.
12. Reed, D. (2008). A synthesis of morphology interventions and effects on reading outcomes for students in grades K–12. *Learning Disabilities Research and Practice*, 23(1), 36–49.
13. Henderson, E. (1985). *Teaching spelling*. Boston, MA: Houghton Mifflin.
14. Schlagel, B. (2002). Classroom spelling instruction: History, research, and practice. *Reading Research and Instruction*, 42(1), 44–57.
15. Varnhagen, C., McCallum, M., & Burstow, M. (1997). Is children’s spelling naturally stage-like? *Reading and Writing*, 9, 451–481.
16. Kwong, T., & Varnhagen, C. (2005). Strategy development and learning to spell new words: Generalization of a process. *Developmental Psychology*, 41, 148–159.
17. Johnson, P. (2004) *Choice words*. Portland, ME: Stenhouse, p. 12.

