

Rosenthal, J., & Ehri, L. (2008). The mnemonic value of orthography for vocabulary learning. *Journal of Educational Psychology, 100*(1), 175-191.

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Summary: Lower socioeconomic students (SES) in the 2<sup>nd</sup> grade (n= 20) and 5<sup>th</sup> grade (n=32) were evaluated to determine if seeing the spellings of novel words had a significant effect on improving students' memory for pronunciation and meaning of the words. "Unfamiliar nouns were defined, depicted, and embedded in sentences" (p. 175) and shown to students. The control was established by not showing the written expression of novel words of a second set of words to the students. Results indicated spellings of the novel words enhanced the students' memory in the retention of pronunciation and meaning over non-repeated exposure to the word. However, strong readers and spellers continuously outperformed their lower ability peers. Finally, the benefits of orthography (ie, seeing the words) on vocabulary acquisition permitted students to be less dependent on phonological techniques (or simply hearing or speaking) to remember the new words.

Assumptions:

- Reading comprehension and academic achievement are reliant on a strong vocabulary base.
- The rate of children's vocabulary growth is dependent on their SES background.
- Students who are well behind their more advanced peers never catch up to the vocabulary levels of their peers.
- Spelling should enhance a student's recall of a word's pronunciation and meaning.
- Word meaning should be acquired at a faster rate if learned in tandem with spellings.
- 2<sup>nd</sup> graders may benefit more from spellings due to their lower level vocabulary base in comparison to 5<sup>th</sup> grade students.

Results:

- When exposed to the written expression of a word, students were able to remember the pronunciation and meaning of new words. In contrast, when students only heard and spoke new words, the recall was not as great as when spellings were incorporated into the learning process.
- The advantages presented by spellings occurred among both 2<sup>nd</sup> and 5<sup>th</sup> grade students.
- At the 5<sup>th</sup> grade level, the higher-level students gained more benefits from the spellings than their lower level same grade peers.
- When using spelling aids, the study results indicate that recalling pronunciations occurred at a higher rate than recurring definitions.

Conclusion:

- "Spellings become connected to pronunciations and enhanced memory for their parts during learning" (p. 186).
- Spellings can be advantageous for both 2<sup>nd</sup> and 5<sup>th</sup> grade students indicating no developmental interference in terms of grade levels on gains seen by students.

- Stronger spellers and readers had more significant gains than their lower speller and reader peers.

#### Suggestions for Teachers:

- Orthography should be used as an important tool to assist lower SES students in their acquisition of vocabulary.
- Writing novel words can be more beneficial for the students than speaking or hearing words.
- Pronunciation, meaning, and spelling should all be a part of teaching new vocabulary to students.
- “Systematic phonics instruction” (p. 189) can be beneficial for the students development of an orthographic system.
- Learning strategies for students should be used to “enhance students’ expressive vocabulary” (p. 189).

#### Suggestions for Literacy Leaders:

- Literacy leaders should stress to teachers the importance of utilizing orthography as a key component of vocabulary instruction.
- Developing training and/or professional development in using orthography as a method in vocabulary development.
- Spelling does not seem to be developmentally limited insofar as students at different elementary grade levels can benefit from orthography study.