Introduction:

• Spelling is a linguistically-based skill (Apel, Masterson, & Niessen, 2004).

• The awareness of sounds in words (phonological awareness, PA), knowledge of the spelling patterns in words (orthographic knowledge, OK), and understanding of relationships among root words and their inflectional and derivational forms (morphological awareness, MA), all influence spelling and reading development (e.g., Apel et al., 2004; Bourassa & Treiman, 2001; Kamberi & Hinton, 2000; Wolter, 2005).

• In addition, reading and spelling tap into the similar stored graphemic (letter) representations in memory called mental graphemic representations (MGRs; Apel & Masterson, 2001).

• Although the process of reading may provide multiple opportunities to form MGRs, reading alone may not be adequate to develop clear mental representations.

• Thus, working on spelling and developing clear MGRs will benefit a child’s reading and spelling abilities, whereas the inverse is not necessarily true.

Purpose:

To determine whether a multiple-linguistic word study approach to spelling is significantly more effective in improving spelling and reading skills in third-grade children than typical classroom methods.

Participants:

• 49 third-grade children
• Ages 8:0 to 9:0
• Enrolled in two third-grade classrooms at a public elementary school
• Hearing, cognitive, and language abilities within typical limits

Procedure:

• Two third-grade teachers implemented all classroom instruction
• Conducted during the 2006-2007 academic school year

• First semester, spelling instruction based on Saxon Phonics and Spelling (Simmons, 2003)

• Second Semester, spelling instruction based on SPELL-Links to Reading and Writing (Wasowicz, Apel, Masterson, & Whitney, 2004)

• All instruction conducted four days a week, 30 minutes each session, for a duration of 16 weeks each semester

Testing conducted in September, December, May

WRMT Word attack/Word Identification (Woodcock, 1998)
Test of Written Spelling (TWS-4; Larsen, Hamill, & Moats, 1999)
CTOPP elision subtest (Wagner, Torgeson & Rashotte, 1999)
Adapted morphological awareness generation task (Carlisle, 2000)

Results/Discussion:

• Both the typical spelling instruction approach (Saxon) and the multiple-linguistic word-study approach (SPELL-Links) improved third grade children’s spelling, phonological awareness, morphological awareness, single-word reading, and reading comprehension skills.

• However, for the multiple-linguistic word-study approach (SPELL-Links) there was a significant time effect [\(\beta^2 = 3.39, p<.05\)] for Word Attack with students in the end of year treatment advancing at a faster rate than those in the first of year treatment.

• Preliminary evidence of a multiple-linguistic word study instruction approach improved both spelling and reading.

• A significant increase in word attack is notable due to decreased statistical power resulting from a limited number of participants, short duration, and the necessity of including two instructional approaches.

• Even though the practical significance may be low, this evidence suggests further investigation with a larger sample and over a longer period of time may be feasible.