The case of case: Children's knowledge and use of upperand lowercase letters

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Spelling is phonological

Pre-school children's knowledge of English phonology

Children's categorization of speech sounds in English

Spelling is not just phonological

Even young children tend to follow certain graphotactic patterns

Treiman 1993 and others: first graders make few errors like "ckak" for *cake*

Even young children use simple morphological relationships among words, to some extent, to aid their spelling

Treiman, Cassar, & Zukowski, 1994: hitting-hit

When do children begin to use nonphonological information in spelling?

Treiman and others: Early

Stage theories: Late

It depends ...





Children's use of upper- and lowercase letters

WET for went

notational convention?

or how young children actually write?

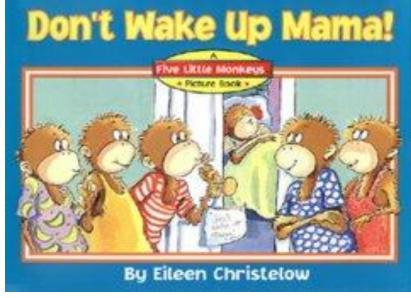
Children's experiences with upperand lowercase letters



I sat there with Sally.

We sat there we two.







Study 1

Retrospective look at use of case in spellings of 390 U.S. children

Testing time	Mean proportion of phonemes represented in spellings (AMPR)
First half kindergarten	.30
Second half kindergarten	.54
First half first grade	.79
Second half first grade	.90
Second grade	.97

AMPR: Automated Measure of Phoneme Representation

Proportion of phonemes represented in spellings of *cat*:

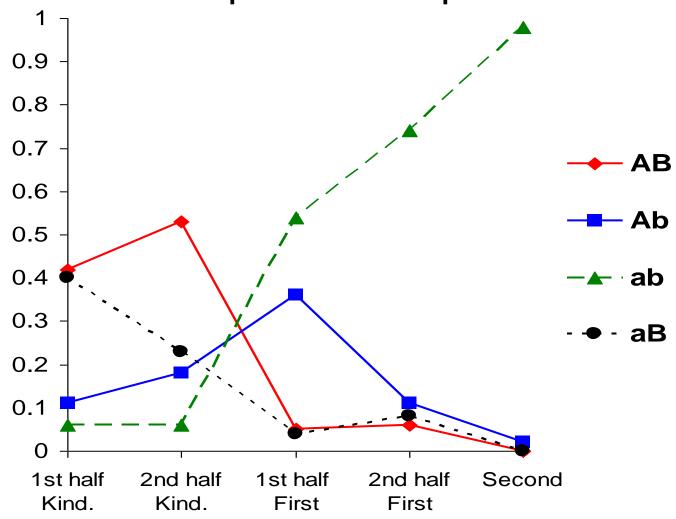
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"kat" = 1.00 (3/3)

"tka" = .67 (2/3)

"kqls" = .33 (1/3)
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Correlates highly (> .90) with measures that use hand scoring

Proportion of spellings with various capitalization patterns



Effects of children's own names

Spellings with noninitial uppercase letter "wrD" for word

Tendency for the uppercase letter in the spelling to be the first letter of the speller's first name

Who wrote "wrD" for word?

Dayna

Study 2

Case specificity in learning about letters?

298 kindergartners

Naming of upper- and lowercase letters as a function of whether letter appears in child's name and, if so, the case in which it appears in name

Proportion of correct responses in letter naming task

Position of letter in child's name	Uppercase form presented	Lowercase form presented
Letter appears in child's name in uppercase	1.00	.83
Letter appears in child's name in lowercase	.92	.81
Letter does not appear in child's name	.89	.70

Conclusion 1: Computerized scoring of children's spelling has promise

AMPR captures young children's ability to represent phonemes in reasonable ways

http://spell.psychology.wustl.edu/AMPR

Conclusion 2: Children's own names influence early literacy

Name provides a stock of letters that children use, and overuse, in writing

Young children sometimes capitalize noninitial letter in a spelling when it is first letter of their name

Children's performance on tests of letter shape letter name associations is affected by whether a letter is in their name and, if so, its case

Conclusion 3: Beginners' spelling is not just phonological

Some types of nonphonological information are acquired early, including knowledge that uppercase letters are more likely to occur at the beginnings of words than later in words

Use of "orthographic" to cover all types of nonphonological knowledge may obscure important differences

tHe enD

Proportion of uppercase letters in various positions of spellings

