



Kindergarten Children's Segmentation and Representation of Consonant Blends: Educational Implications

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Abstract

This study explored kindergarten children's phonological awareness by examining the segmentation and representation of initial (e.g., skate) and final (e.g., jump) consonant blends. Children were differentially successful with blend segmentation based on phonological properties of blends. A clear teaching progression emerged from children's responses and will be discussed. Blend segmentation is a specific area in which speech-language pathologists can collaborate with classroom teachers in phonological awareness and spelling instruction.

Introduction

There is general agreement that children must have a foundation of phonemic awareness, particularly phonological segmentation, upon which to build early decoding and spelling skills (e.g., Adams, 1990). One aspect of phonemic segmentation that has received limited attention is segmentation of consonant blends. Segmentation of singleton consonants and vowels (CVC, CV, VC) does not automatically generalize to segmentation of blends (Bruck & Treiman, 1990).

Segmentation and representation of consonant blends is a distinct, more difficult skill than segmentation of singletons. Kindergarten children show an emerging ability to segment and represent consonant blends. The ability to segment and represent consonant blends varies during this early period of emergence depending on linguistic and phonetic features of blends (e.g., word position, blend class, homorganicity; Werfel & Schuele, 2008).

Purpose

The purpose of this poster is (a) to consider whether current phonological awareness and spelling instruction practices are consistent with the findings of Werfel and Schuele (2008) and (b) to consider implications for changing practice.

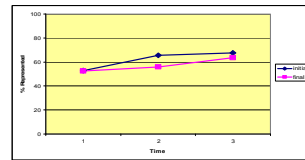
Methods

Participants were 57 typical kindergarten children (age $M = 72.0$ months, $SD = 4.0$ months) attending two non-public schools (seven classrooms). Participants spoke English as their native language and had no history of speech-language therapy. Children participated in three assessments at six-week intervals in the latter part of the kindergarten year. Children's ability to segment consonant blends was measured with a developmental spelling task (26 monosyllabic words with consonant blends; 18 initial blends and 8 final blends). Responses were scored for logical representation of speech sounds and data were analyzed to determine differential success across types of blends.

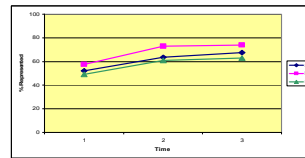
Results

The graphs below depict patterns of differential success identified in the performance of the kindergarten children. For more detailed results, see Werfel & Schuele (2008).

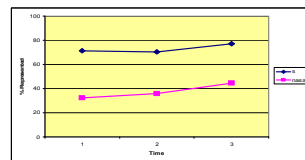
Children were more likely to represent initial blends than final blends.



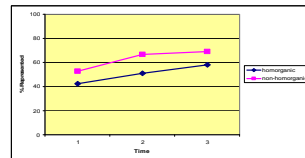
Children were more likely to represent initial l-blends than initial s-blends and initial r-blends.



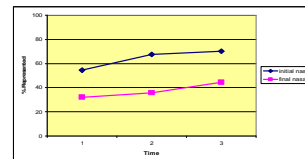
Children were more likely to represent final s-blends than final nasal blends.



Children were more likely to represent nonhomorganic blends than homorganic blends.



Children were more likely to represent initial nasal blends than final nasal blends.



Educational Implications

The results of this study provide clear implications for clinical practice.

The order of development of segmentation and representation of consonant blends has implications for educational programs for young children. Explicit instruction in phonological awareness skills has proven effective for children who struggle learning to decode words (e.g., Ball & Blachman, 1988).

Introducing words with blends that are easier to segment first is an important component of segmentation instruction. Likewise, in choosing spelling words, teachers should first introduce words with blends that are easier for children to segment and represent.

To effectively teach phonological awareness, it is critical to understand how all aspects of phonemic segmentation develop. For children who struggle to acquire phonological awareness, it is important that educators are able to optimize instruction (e.g., sequence of instruction from less complex to more complex). It is important to consider factors that affect development of the ability to segment and represent consonant blends when choosing words for teaching segmentation. For example, *jump* is not an appropriate word for a student with little segmentation skill, because final nasal blends are particularly difficult. Instead, the results of this study suggest that beginning instruction with final s-blends would be more developmentally appropriate. Based on the children's responses, a suggested teaching progression was developed.

Suggested Sequence of Instruction
Final s-blends
Initial l-blends
Non-homorganic initial s-blends
Homorganic initial s-blends and initial r-blends
Final nasal blends

SLP's Collaborative Role

Reaction from clinical speech-language pathologists (SLP) has revealed role confusion with regard to early literacy instruction (e.g., Apel, 2008; McGrath, 2008; Sudduth Feeney, 2008). This study provides evidence of a specific area in which SLPs can collaborate with classroom teachers in early reading and spelling instruction. Specific knowledge of phonetics is needed in order to effectively consider such incremental phonological awareness as blend segmentation. Teachers may lack specific knowledge of speech sounds that should influence word choice in early reading and spelling tasks (Spencer, Schuele, Guillot, & Lee, 2007). Additionally, SLPs can assist teachers in understanding how the range of invented spellings that kindergarten children provide offers valuable insight into their phonological awareness.

Curricula

We examined spelling and phonological awareness curricula in order to determine whether or not the order of instruction was consistent with the developmental progression suggested based on the results of Werfel and Schuele (2008).

SPELLING CURRICULA

Overwhelming, spelling curricula contained words with blends in no particular order. Spelling words were much more likely to be selected based on the vowel.

Spelling Curriculum	Spelling Lists of Consonant Blend Words?	Follow Order of Development?
SRA McGraw-Hill	YES	NO
Zaner-Bloser	YES	NO
Houghton Mifflin	YES	NO
Saxon	NO, BUT INCLUDED	NO

PHONOLOGICAL AWARENESS CURRICULA

Less than half of the phonological awareness curricula taught blend segmentation. Only one introduced blends in any order at all, and it only somewhat followed the developmental progression suggested based on the results of Werfel and Schuele (2008).

Phonological Awareness Curriculum	Consonant Blends Addressed?	Follow Order of Development?
Phonemic Awareness in Young Children	YES	NO
Road to Reading	YES	SOMEWHAT
Sounds About	YES	NO
Phonological Awareness Training for Reading	NO	---
Road to the Code	NO	---
The Phonological Awareness Book	NO, BUT INCLUDED	NO
A Sound Start	NO, BUT INCLUDED	NO

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