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Examining teachers' language in Head Start classrooms from a Systemic Linguistics Approach☆

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ABSTRACT

This study examined teacher language use in Head Start classrooms ($N = 43$) from the perspective of the Systemic Linguistics Approach (SLA) to describe the nature of teacher support for children's acquisition of academic language and factors that shape language use. Using a sample of teachers who were part of a larger study on early language/literacy curricula, we hypothesized that evidence of emergent academic language registers might be identified using utterance-level descriptions of language and that language use would vary across the three settings examined: Book Reading, Group Content Instruction, and Small Group Instruction. Differences in overall patterns of language were also expected to relate to teachers' pedagogical skill and the intervention condition to which they were exposed in the larger study. Language use within setting was expected to vary by the content of instruction and, in Book Reading, the books being read. These hypotheses were examined using a corpus of 146,000 teacher utterances from a study in Head Start pre-kindergarten classrooms that included a business-as-usual condition and two intervention conditions. Language variables included use of sophisticated vocabulary, diversity of words used, number of words used, and syntactic complexity; semantic content variables included talk about vocabulary, concepts, and skills. We found evidence of emergent academic registers in Book Reading, Group Content Instructional Time and Small Group Instruction; differences in teacher talk were associated primarily with setting, and few differences related to teacher pedagogical skill or intervention condition. Language use during Book Reading was affected by the type of book read. Our findings identify factors that should be considered when planning interventions and studying classroom language.

1. Introduction

Language ability measured in the early childhood years is strongly associated with later language (Claessens, Duncan, & Engel, 2009; Dickinson & Porche, 2011; NICHD ECCRN, 2005; Storch & Whitehurst, 2002), and by the primary grades, language is the strongest predictor of reading comprehension (Kendeou, White, van den Broek, & Lynch, 2009; Tilstra, McMaster, van den Broek, Kendeou, & Rapp, 2009; Vellutino, Tunmer, Jaccard, & Chen, 2007). There have been many efforts to foster the development of early language skills through classroom-based interventions, but these have had mixed success with one possible reason being difficulties associated with changing teachers' ways of using language (Dickinson, 2011). We have little knowledge of how language is used in preschool classrooms or what factors shape its use.

In this paper, we addressed this issue by examining factors that affected language use of teachers in Head Start classrooms that participated in a randomized control trial study (Kaiser et al., 2010). We drew on the Systemic Linguistics Approach (SLA) to conceptualize language and related discussions of academic language (Halliday, 1993; Schleppegrell, 2012; Snow & Ucelli, 2009). We examined features of teachers' language that are associated with an academic language register, most of which also have been found to be related to enhanced language learning, and sought to identify contextual factors that affected patterns of language use and to see

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if effects of the intervention employed were evident. In this paper, we first examine our data for evidence of academic language registers across settings and then report results of analyses of factors that SLA theory suggest might shape language use.

1.1. A Systemic Linguistics Approach (SLA) to discourse in preschool classrooms

SLA theory. Researchers working in the Systemic Linguistics Approach (SLA) (Halliday, 1993; Schleppegrell, 2001, 2012) argue that language use is the product of social forces; that language is organized by implicit behavioral norms adopted by communities, and that how people use language is closely associated with their identities (Gee, 2008; Heath, 1983). Michael Halliday (1993) asserted "...language has the power to shape our consciousness; and it does so for each human child, by providing the theory that he or she uses to interpret and to manipulate their environment (p. 8)." He argued that the development of specific linguistic resources varies within societies, with factors such as social class, education, and power relationships affecting access to different resources. SLA theorists helped champion curriculum reforms in Australia (Christie, 2005), reflecting the belief that curriculum is a lever that can be used to expand access to semiotic resources associated with access to power in western technological societies.

A construct central to SLA is the notion of language registers, setting-specific packages of linguistic competence that reflect and are shaped by expected role relationships among participants and the content of the interaction. Registers are identifiable by specific linguistic features and functions, and different registers are used for different intellectual and social purposes. The SLA perspective has entered educational research and policy in the United States through the discussion of academic language registers. Schleppegrell (2012) defines these as "...the new set of registers that many children encounter for the first time on arrival at school; a set of registers through which they will be expected to learn and participate as they move through the grades" (p. 411). These registers are sets of lexical and grammatical features of language that vary across settings and occasions (Schleppegrell, 2001). Structural characteristics of academic language are complex syntax and precise vocabulary related to academic content that tends to be used infrequently (Schleppegrell, 2012; Snow, 2010). Nagy and Townsend (2012) emphasize the functional characteristics saying, "Academic language is the specialized language, both oral and written, of academic settings that facilitate communication and thinking about disciplinary content (p. 92)". As children "think about disciplinary content," a metacognitive stance is encouraged, which is another hallmark of language associated with the academic register (Olson, 1994; Ravid & Tolchinsky, 2002).

SLA and classroom research. The feature of academic language often associated with academic success is vocabulary knowledge (Snow, 2010), which is a predictor of reading comprehension (Dickinson, McCabe, Anastasopoulos, Peisner-Feinberg, & Poe, 2003; Kendeou et al., 2009; Snow, 2010; Storch & Whitehurst, 2002; Vellutino et al., 2007). Knowledge of complex syntax also is associated with better reading comprehension (Share & Leikin, 2004) and vocabulary (Nassaji, 2006; Ouellette & Beers, 2010; Vellutino et al., 2007). In classrooms, the use of sophisticated words (Dickinson & Porche, 2011) and complex syntax (Huttenlocher, Vasilyeva, Cymerman, & Levine, 2002; Vasilyeva, Huttenlocher, & Waterfall, 2006) has been found to be related to children's language growth. Use of language in ways associated with academic language registers also has been found to affect learning, as opportunities to talk about the meanings of words are related to vocabulary growth (Dickinson & Porche, 2011; Gerde & Powell, 2009; Roth, Speece, Cooper, & DelaPaz, 1996).

Classroom research informed by the SLA perspective has mostly been done in upper-elementary and middle-grade classrooms (Nagy & Townsend, 2012; Schleppegrell, 2009, 2012; Townsend, Filippini, Collins, & Biancarosa, 2012). These studies have focused almost exclusively on academic vocabulary, and none have described language environments; therefore, there have been no prior efforts to look for interrelationships among language features of academic language registers.

Work done with primary-grade children indicates that many come to school from homes where language associated with academic language registers is not typically used, and, as a result, they have relatively limited command of this register (Gee, 2008; Michaels, 1981; Schleppegrell, 2001, 2012). This is also the case for younger children. Leseman, Scheele, Mayo, and Messer (2007) examined narratives of Dutch-speaking children for linguistic features indicative of academic language (e.g., content words, connectives, textual cohesion) and found strong intercorrelations among these linguistic features and between those indicators of academic language and receptive vocabulary and narrative comprehension. Social class was related to academic language and vocabulary, but a measure of home language use, book reading and frequency of talk about shared memories and topics of general interest, accounted for all the socioeconomic status variance. A study of three-year old Dutch-speaking children also revealed evidence of home effects on acquisition of features of academic language (Scheele, Leseman, Mayo, & Elbers, 2012). These findings echo early studies of the linguistic markers of home book reading found in the language of emergent readers who had heard many books (Purcell-Gates, 1988).

Researchers using the SLA and academic language perspectives have used linguistic theory to shape curricula and guide classrooms interventions. In the United States, efforts to teach academic vocabulary have occurred in upper-elementary to middle-grade classrooms (Lawrence, Capotosto, Branum-Martin, White, & Snow, 2012; Lesaux, Kieffer, Faller, & Kelley, 2010; Mancilla-Martinez, 2010). Efforts to foster vocabulary learning seek to create opportunities for children to use language as they engage in discussion and argumentation. In the preschool years, interventions have not been characterized in terms of academic language, but the current study was designed to foster language with particular attention to vocabulary and conceptual knowledge, outcomes associated with academic language competence.

1.2. Language environments and early literacy development from an SLA perspective

Language use varies across preschool classrooms (Dickinson & Smith, 1991; Dickinson & Tabors, 2001; Justice, Mashburn, Hamre, & Pianta, 2008; Massey, Pence, Justice, & Bowles, 2008); therefore, features of language indicative of academic language are likely differentially present. In this study, we examined linguistic elements associated with academic language to distinguish emerging patterns of discourse reflective of an academic language register and identify factors that affect frequency of use of these elements. These uses of language are of great importance in preschool when children begin acquiring academic language as they expand their vocabulary, acquire complex grammatical structures, and use language for metalinguistic purposes such as talking about word meanings (Ravid & Tolchinsky, 2002).

Academic language registers in preschool classrooms. We examined language from a structural perspective, examining use of vocabulary and complex syntax, and a functional perspective, examining use of language for reflective and conceptual purposes.