Reading and Writing in Fourth Grade Children with and without Language Learning Disabilities

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Introduction

• Reading and writing are important language and instructional outcomes for school-age children and should be considered part of a comprehensive language evaluation.

• Ever increasing demands on educators require detailed assessment for formative and progress monitoring purposes; and a reduction in assessment redundancy is warranted to support more time on instructional targets.

• Children with Language Learning Disabilities (LLD) demonstrate poorer language abilities that peers with typical development (TD) including reading and writing abilities (Catts et al. 2002; Roth et al. 2002; Snowling et al., 2000; Wise et al. 2007; Dockrell, et al. 2007; Fey, et al. 2004; Gillam & Johnston, 1992; Koutsoftas & Gray, 2012; Mackie & Dockrell, 1992; McFadden & Gillam, 1996; Scott & Windsor, 2000; Windsor, et al., 2000)

• An important consideration is to better understand the interplay of reading and writing abilities in children with LLD and TD due to the increasing academic demands of reading and writing in the fourth grade.
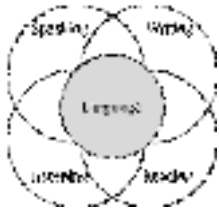
• The purpose of this study is to better our understanding of reading and writing in fourth grade children using assessment approaches representative of school expectations. The following **research questions** were addressed:

1) Do children with TD outperform children with LLD on standardized reading assessments used for progress monitoring purposes?

2) Do children with TD outperform children with LLD on measures of writing consistent with current classroom instructional practices?

3) Are there significant relationships among these discrete measures of reading and writing?

Sample

N = 57	TD (n = 40)	LLD (n = 17)
Mean Age in Years	10.02 (.30)	10.17 (.50)
Mother's years of Ed	14.80 (1.73)	14.30 (2.31)
Female : Male	21 : 19	8 : 9

Procedures

• Participants completed the four day research protocol in small groups at their schools.

Research protocol administered across 4 days within a 10 day period.

• Reading tests and writing samples were scored or coded by trained research assistants who were undergraduate or graduate students.

Results

Correlations among Reading and Writing Measures across Participants		Reading Measures			
		Sentence Comprehension	Passage Comprehension	Vocabulary	Listening Comprehension
Writing Measures	Planning Composite	.002	.111	.112	.100
	Productivity Composite	.500**	.539**	.443**	-.058
	Complexity Composite	.154	.180	.261*	.110
	Accuracy Composite	-.587**	-.491**	-.610**	-.225
	Mechanics Composite	-.449**	-.338*	-.528**	-.175
	Quality Composite	.255	.198	.376**	.107

* p < .05; ** p < .01

Discussion

• Children with TD outperformed children with LLD across a variety of reading and writing measures similar to those used for progress monitoring purposes in academic settings.

• For reading, children with LLD performed significantly poorer on standardized measures of vocabulary, sentence and passage comprehension.
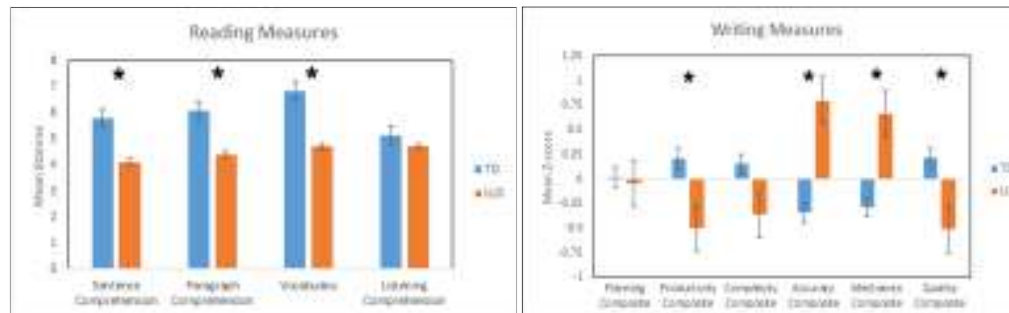
• For writing, children with LLD produced significantly poorer quality stories that were shorter with more accuracy (spelling & grammar) and mechanics errors than peers with TD.

• Relationships among measures of reading and writing indicated that vocabulary assessed through the GRADE (Williams, 2001) was related to all but one aspect of writing in this sample. Furthermore, writing productivity, accuracy, and mechanics were most related to measures of reading suggesting that higher scores on reading resulted in better scores in writing.

• The relationships among reading and writing in fourth grade children are clear and it is important to consider a multi-modal language approach when assessing and treating language impairments.

• An important outcome of this study is a suggestion that by using one measure of reading, specifically the vocabulary subtest, progress toward reading and writing outcomes can be monitored while allowing for a reduction in assessment load for practitioners.

Acknowledgements

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