

Features of Academic Vocabulary Test Items Affecting Their Difficulty for English Learners

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Background

The percentage of English Language Learners in public schools in the United States is growing rapidly. Accurate and reliable assessments of English Language Learners academic achievement is a national concern. The poor psychometric performance of current assessments may be attributed to:

- Language of test items differentially influence English Learners academic performance.

Content-irrelevant variance is dependent on lexical and/or syntactic item characteristics that are closely related to language proficiency, and has been shown to exert a greater influence on item difficulty for English Learners.

- Many standardized assessments, such as the Peabody Picture Vocabulary Test and Gates, are normed only on English-only population.

Students coming from other linguistic and cultural backgrounds may misinterpret or respond differently to certain test items regardless of their English proficiency.

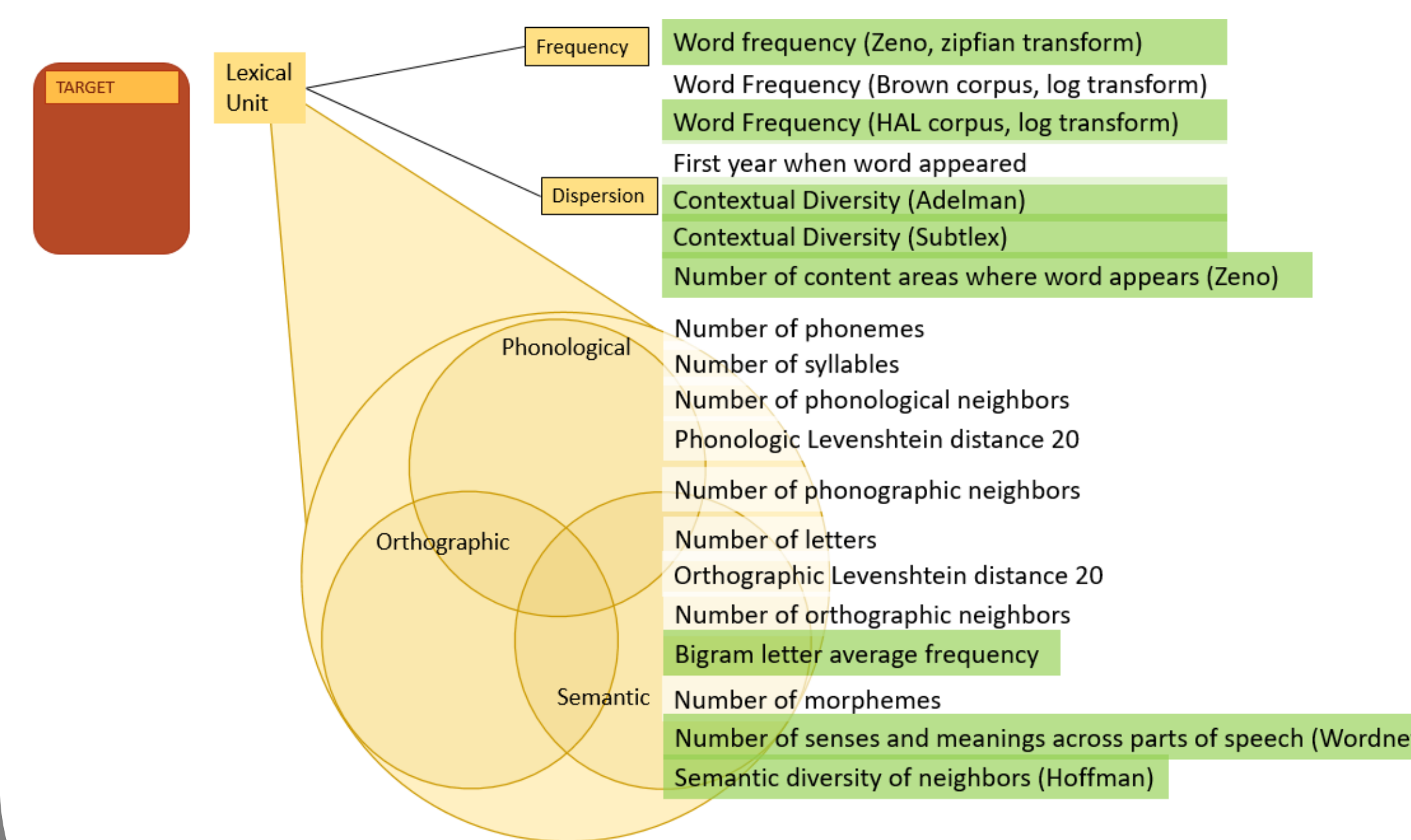
Sample

		Language Proficiency Status			
		EO (n = 3600)	IFEP (n = 1034)	RFEP (n = 3793)	ELL (n = 1851)
Year 1 2010-2011	6 th	982	220	908	532
	7 th	967	275	1029	518
	8 th	921	322	1051	469
	All	2870	817	2988	1519
Year 2 2011-2012	6 th	614	194	713	243
	7 th	70	13	48	52
	8 th	46	10	44	37
	All	730	217	805	332

Word Generation Academic Vocabulary Test

- ☐ Synonym task
- ☐ 50 items on each of two forms (years 2010-2011 and 2011-2012), some unique (81 items) and some shared across forms (19 items)
- ☐ Four response options (key and three distractors)
- ☐ Distractors: semantically, phonologically, or orthographically related, or unrelated

Item Characteristics



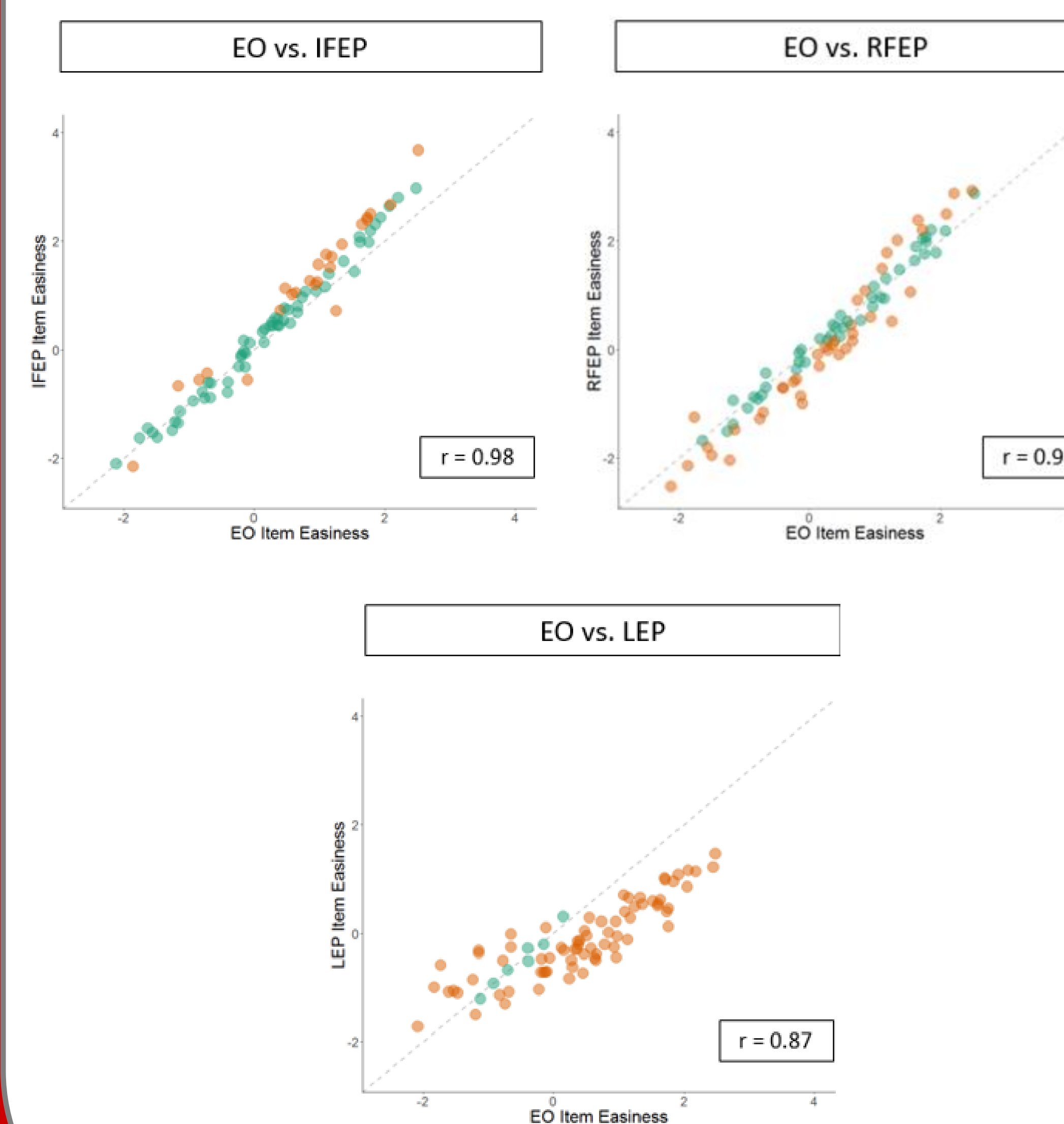
Data Analytic Approach

Two-stage data analytic approach:

- Saving values of predicted item easiness from differential item functioning analyses
- Explaining predicted item easiness using target word characteristics and student characteristics (language proficiency status) as predictors

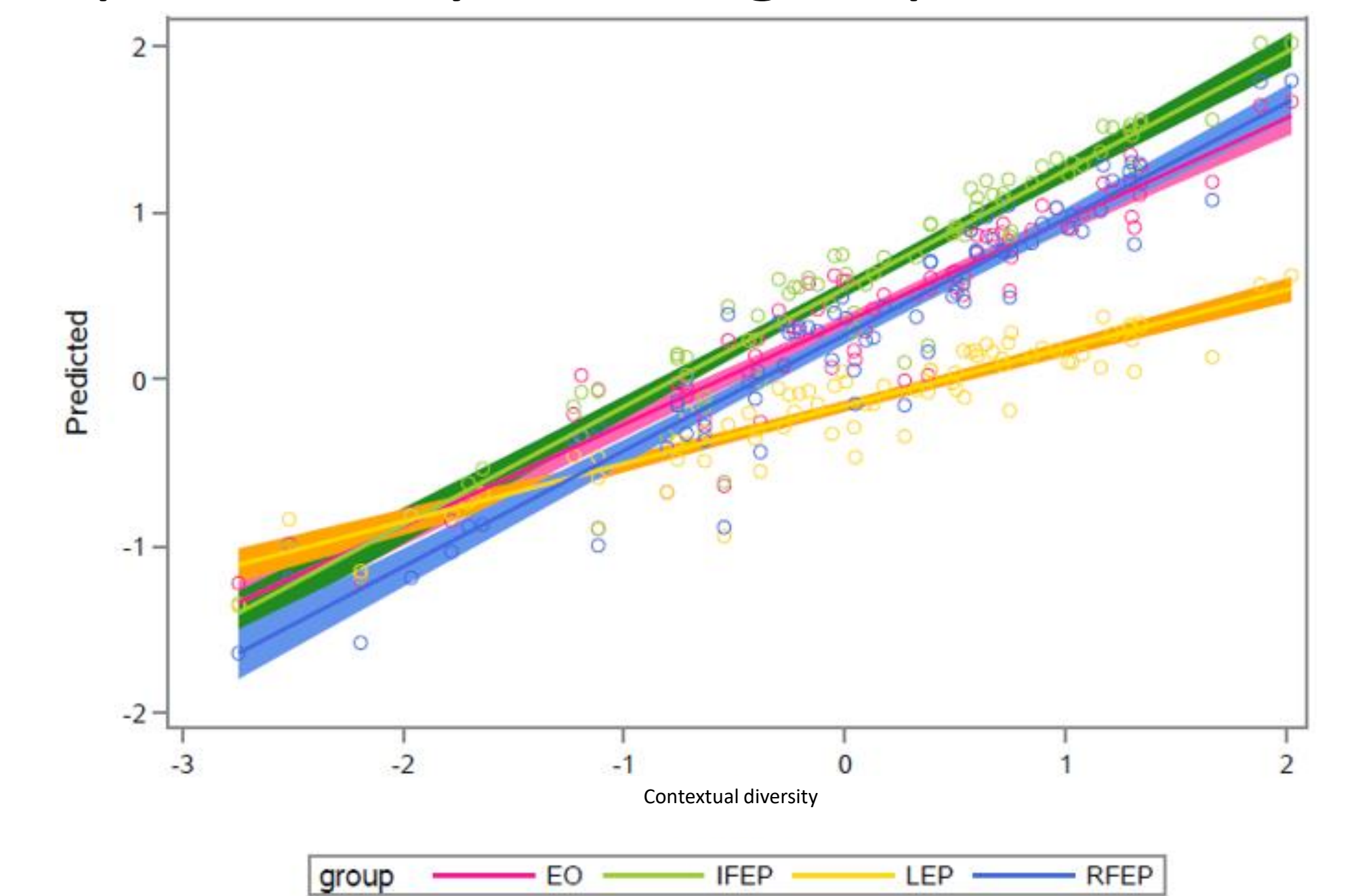
Focusing on target word characteristics by language proficiency status interactions

DIF Results

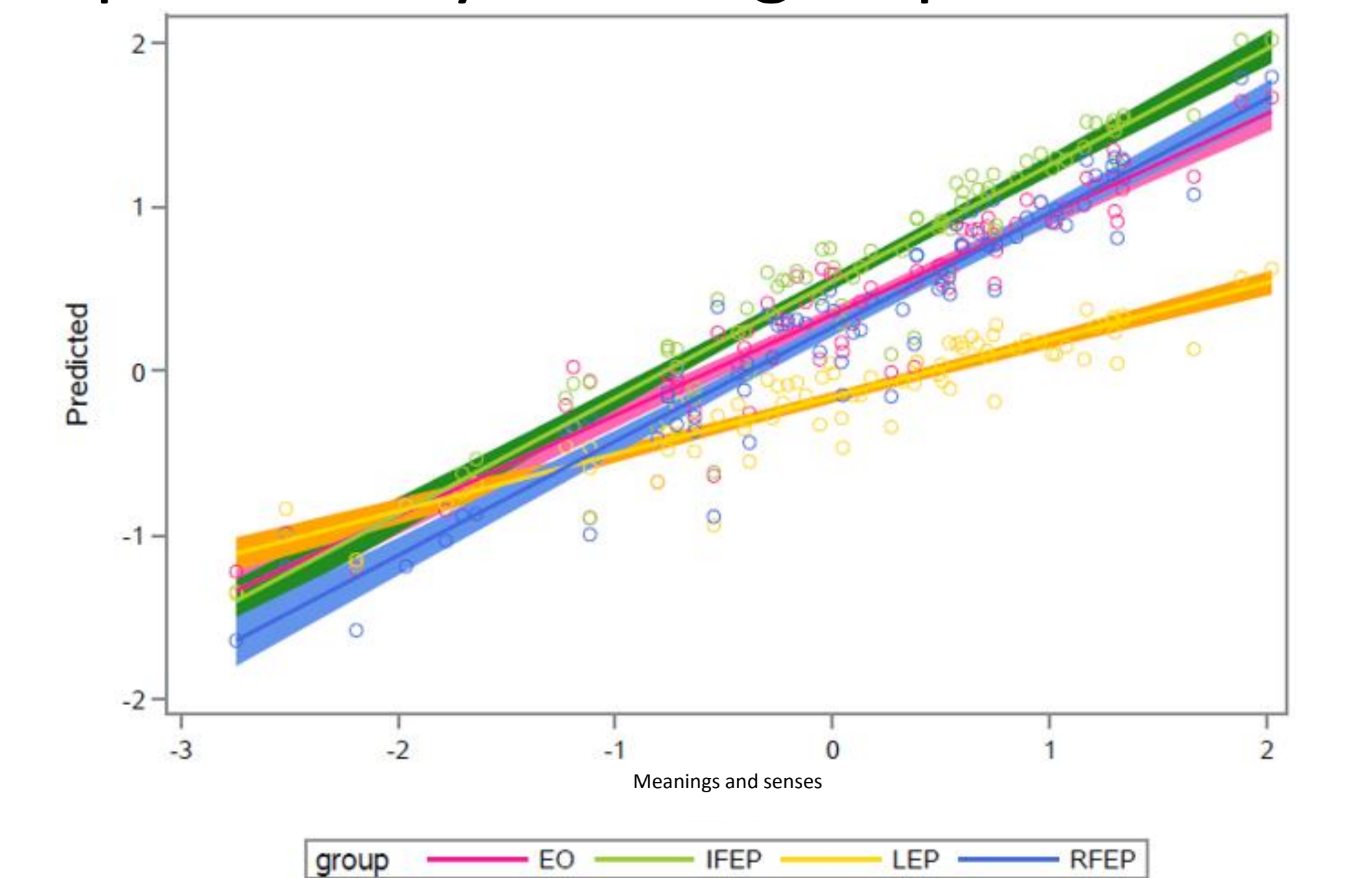


Explaining Item Difficulty

Contextual diversity by language proficiency status/group interaction



Meanings and senses by language proficiency status/group interaction



Conclusions

- ☐ Contextual diversity versus Frequency: where we encounter a word versus how often
- ☐ More meanings & senses: easier items
- ☐ Initially Fluent & Reclassified students: show similar patterns to English-only students