

Selected References

- Martiniello, M. (2008) Language and the performance of English language learners in math word problems. *Harvard Educational Review*, 78 (2), 333-368.
- Martiniello, M. (2010). Linguistic complexity in mathematics assessments and the performance of English language learners. In *Research Monograph of TODOS: Mathematics For All. Assessing English-Language Learners in Mathematics*. Volume 2. Monograph 2: Linguistic complexity in mathematics assessments. National Education Association.
- Martiniello, M. & Wolf, M. K. (2012). Exploring ELLs' understanding of word problems in mathematics assessments: The role of text complexity and student background knowledge. Book chapter in S. Celedón-Pattichis and N. Ramirez (Eds.), *Beyond good teaching: Strategies that are imperative for English language learners in the mathematics classroom*. Reston, VA: National Council of Teachers of Mathematics.

The articles above investigate mathematics word problems that show large difficulty differences for ELL and non-ELLs with equal mathematics proficiency. The articles include a discussion of the item linguistic features that generate disproportionate difficulty for ELLs and provide detailed descriptions of students responses gathered through think-aloud protocols. Implications for item development and test score validity and fairness are discussed at length in the first two articles. Implications for mathematics teachers are discussed in the third one.

- Wolf, M.K. & Martiniello, M. (Summer 2010). Validity and fairness of assessments for ELLs: The issue of language demands in content assessments. In *AccELLerate !* Volume 2: Issue 4, National Clearinghouse for English Language Acquisition (NCELA), George Washington University, Washington: DC. Retrieved from http://www.ncele.gwu.edu/files/uploads/17/Accellerate_2_4.pdf

This brief article summarizes the research on the relationship between linguistic complexity of items in mathematics assessments and the differential functioning of items for the population of ELLs and non-ELLs.

- Martiniello, M. (2009). Linguistic complexity, schematic representations, and differential item functioning for English language learners in math tests. *Educational Assessment*, 14: 3, 160-179.
- Wolf, M. K. & Leon, S. (2009). An investigation of the language demands in content assessments for English language learners. *Educational Assessment*, 14 (3&4), 139-159.

Martiniello, Maria. *Diversity and Equity: Assessment Challenges and Examples for English Learners*. CIME MSRI April 2013, Berkeley California

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These two articles describe at length studies investigating the relationship between linguistic complexity and Differential Item Functioning - DIF for ELLs. Martiniello's article focuses on mathematics and discusses the role of non-linguistic schematic representations attenuating the impact of linguistic complexity on item difficulty for ELLs compared to non-ELLs with equivalent mathematics proficiency.

Research Monograph of TODOS: Mathematics For All. Assessing English-Language Learners in Mathematics. Volume 2. Monograph 2: Linguistic complexity in mathematics assessments. National Education Association.

This monograph focuses on the assessment of mathematics with a particular emphasis on the role of language in the mathematics assessments of Latino/Hispanic students and ELLs. Several of the papers in this volume identify non-mathematical features that make tasks more complex for Hispanic-Latino/a students and shed light into the thinking of students through "think aloud" interviews.