

Colloquium

Amy E. Wagler and Lawrence M. Lesser

The University of Texas at El Paso

Friday, November 9, 2012 at 3 pm in Bell Hall 143

“English Language Learners in the Statistics Classroom: Research, Resources, and Recommendations”

Even English language learners (ELLs) with strong English conversational skills cannot be assumed to have fully developed the complex linguistic skillset needed to learn and articulate statistical concepts in an academic setting. Members of our research team developed the Communication, Language And Statistics Survey (CLASS) instrument to assess language-related issues faced when learning statistics. Informed by research on Spanish-speaking ELLs (Lesser and Winsor, 2009; Lesser, 2011; Wagler and Lesser, 2011; Lesser, Wagler, Esquinca and Valenzuela, revised paper under review; Wagler, Lesser and Gonzalez, in preparation), the CLASS reveals differences between how ELLs and non-ELLs respond to particular teaching practices, move between academic and everyday registers, and interpret context in statistics problems. This research may identify factors and strategies that contribute to student learning (for ELLs and others), and so create more effective and equitable educational opportunities. In addition to the CLASS research findings, differential item analysis results are presented that reveal reliability and validity issues when using established statistics conceptual inventories on ELL populations. We will also share preliminary results regarding the use of resource accommodations for ELLs.

Joint Work with: Alberto Esquinca, undergraduate Ariel Gonzalez, and graduate students Angelica Monarrez, Berenice Salazar, and Saul Soto

Acknowledgments: Most of this work was presented as an invited paper at the 2012 Joint Statistical Meetings. This work is supported in part by the UT System LSAMP (Louis Stokes Alliance for Minority Participation program, funded by NSF grant HRD-0703584) Project LEAP-UP (US Department of Education grant T195N070132), and UTEP’s Campus Office of Undergraduate Research Initiatives (COURI).