Abstract: For more than twenty years researchers in mathematics education have tried to understand how to improve the mathematics achievement of Latino English Language Learners (ELLs) in the United States. This population is the fastest growing language group in public schools and it is predicted that, in the near future, most mathematics teachers will have ELLs in their classrooms. In view of preparing these educators, significant research in bilingual education, and research focused on Latino ELLs, has uncovered a number of instructional strategies that improve learning opportunities for these students. During the same time period other researchers have focused on the pedagogical content knowledge that empowers math teachers to help their students. Yet, until now, research has not considered the intersection of these two areas. What do mathematics teachers of ELLs need to know and how can this knowledge be measured? This presentation will narrate the development of a research project aimed at both finding out what knowledge is needed by mathematics teachers who teach Latino ELLs and at creating valid and reliable measures for such knowledge.

Aaron Wilson is a Doctoral Research Assistant at Texas State University - San Marcos. He received his BA in Spanish and BS in mathematics at Texas State. For several years, he taught mathematics at a central Texas high school before pursuing a degree leading to teaching and research at the university level. His mathematical interests include such open problem as the union-closed sets conjecture in combinatorics. His current research is concerned with teacher knowledge for teaching ELLs and the quality of mathematics instruction. He is also interested in combinatorics education and in developing alternative teacher preparation models such as a coursework focused on video analysis.