

*My dad gave me one dollar bill  
'Cause I'm his smartest son,  
And I swapped it for two shiny quarters  
'Cause two is more than one!*

— Excerpt from *Smart*, by Shel Silverstein

## **ESL and Math**

In the future we will see less of the “smartest son” as ESL instructors begin to integrate math into their teaching. The federally-funded Workforce Innovation and Opportunity Act (WIOA) will soon require that teachers assist immigrants and English language learners to go beyond acquiring skills in reading, writing, speaking and comprehension - and include math. Teaching math to ESL students is now part of the implementation of College and Career Readiness Standards that reflect broad agreement about what adult learners need to know to be prepared for postsecondary education/training and the workplace.

Our own Maribel Ojeda, data manager, Center for Literacy, is leading the effort in Pennsylvania, providing professional development for ESL teachers and teachers who are preparing students for the High School Equivalency Exams.

Maribel started her work with the standards as an invited member of a team of Pennsylvania professionals at The National Adult Education College and Career Readiness Training Design Initiative in Louisville, Kentucky, in 2013, which lead to the opportunity to make recommendations to the state regarding implementing College and Career Readiness Standards in instruction. This was followed by Maribel providing professional development to practitioners throughout Pennsylvania.

With Lynda Ginsburg, she recently co-trained ESL teachers who are funded by the Pennsylvania Department of Education to teach math in their classes. Dr. Ginsburg is a senior research associate for mathematics education at the Center for Mathematics, Science, and Computer Education at Rutgers University. Maribel did two workshops in Pittsburgh and Malvern that combined sample problem questions and theory. “What we emphasized with the teachers is how ESL learners deal with numbers on a daily basis, that they will use math in their jobs, that they want to help their children with school and homework, and that they need to understand and use U.S. conventions and measures,” she said.

Maribel will continue her professional development in this area by going to a conference on June 8-9, 2016 in Washington D.C. that is sponsored by OCTAE, the US Department of Education's Office of Career, Technical and Adult Education.