

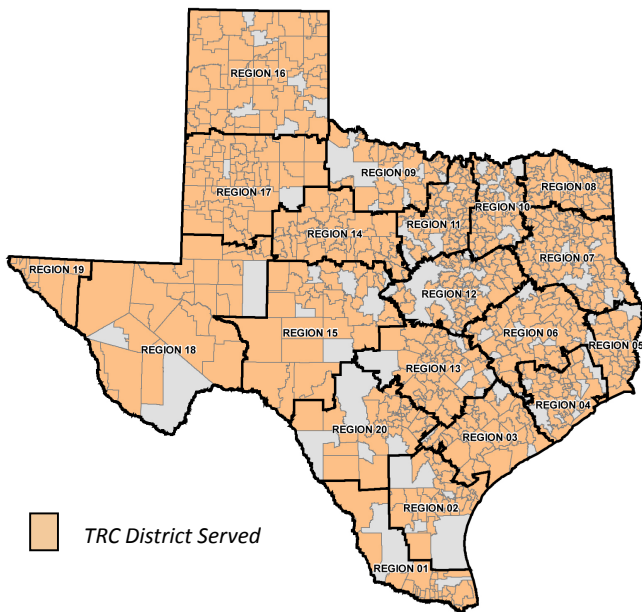


# Texas Regional Collaboratives for Excellence in Science and Mathematics Teaching

## RESULTS: IMPACT ON STUDENTS AND TEACHERS SERVED

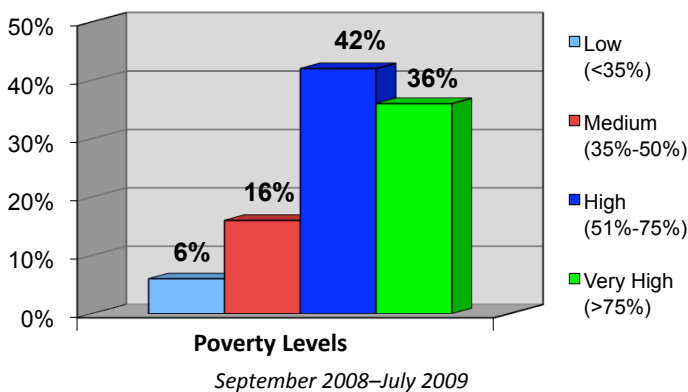
Geographic distribution: teachers from 746 school districts and charter schools and 2,371 campuses have participated in the Texas Regional Collaboratives science program. The mathematics program served teachers in 778 districts and charter schools representing 2,244 campuses. The map below represents district participation in the TRC.

### District Participation in the TRC

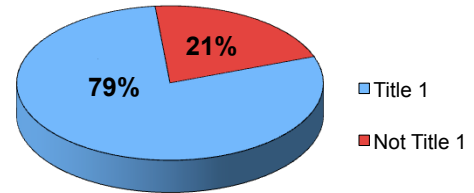


Student demographics on TRC campuses are representative of the students across the state, both in regard to student ethnicity and socioeconomic status. Poverty Levels for public schools are determined by the percentage of students who receive free or reduced lunch.

### Poverty Levels of Participating Schools

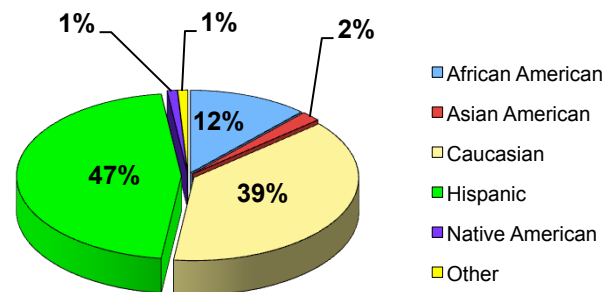


### Title I Status of Participating Campuses



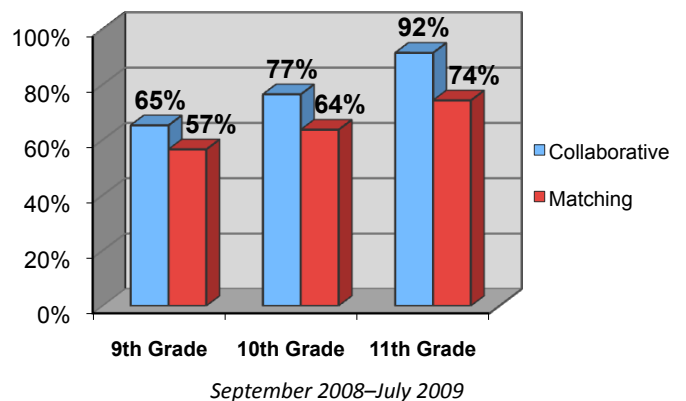
Based on a sample of 10,106 teachers who provided campus poverty level data from September 2008–July 2009

### Ethnicity of Students Served by Collaborative Teachers



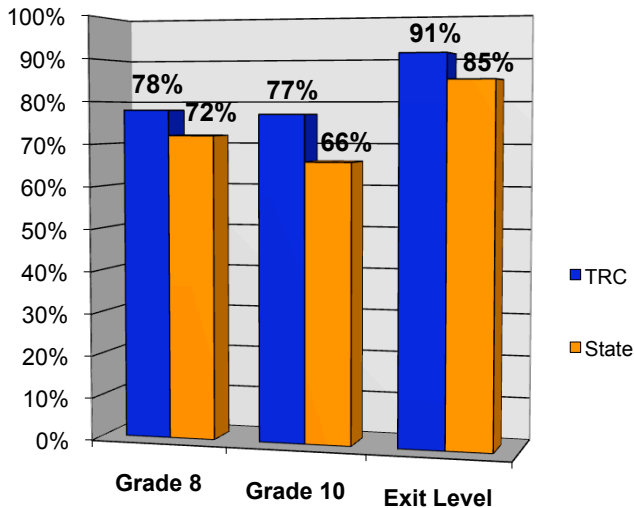
Student achievement is a measure of effective professional development. TRC data indicates a positive relationship between TRC teacher participation and student achievement. The example below illustrates that students in UT Tyler Regional Mathematics Collaborative teachers' classrooms outperformed a matched group of students on high school math TAKS by significant percentage at every grade tested.

### UT Tyler Regional Collaborative Math TAKS



Passing percentages for TRC campuses on the state standardized science test exceed state and regional averages. 2009 data from TAMU-Texarkana Regional Science Collaborative campuses demonstrate higher grade 8, 10, and Exit Level TAKS scores than state average.

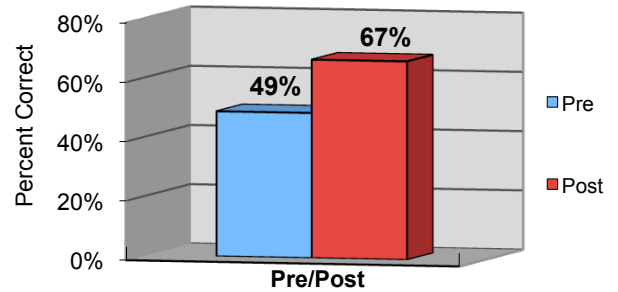
### Student Achievement on TAKS TAMU-Texarkana Regional Collaborative



Science TAKS scores of students of the TAMU-Texarkana Regional Science Collaborative compare to the State scores

Many of the Regional Collaboratives developed formal procedures for identifying changes in teacher science content knowledge as a result of TRC training. These Collaboratives administered 77 different tests in a pre/post test format. Test content covered a range of topics including physics, chemistry, biology, earth science, and science process skills. Pre/post test data comparison shows a significant 18-point gain in teacher content knowledge.

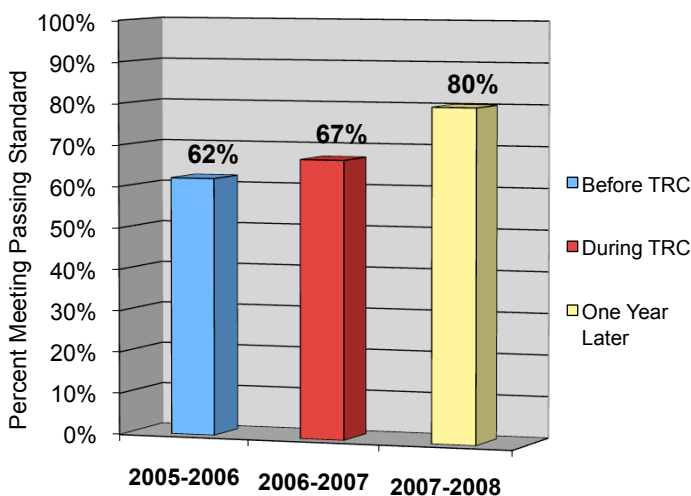
### Average Science Teacher Mentor Content Knowledge Gain



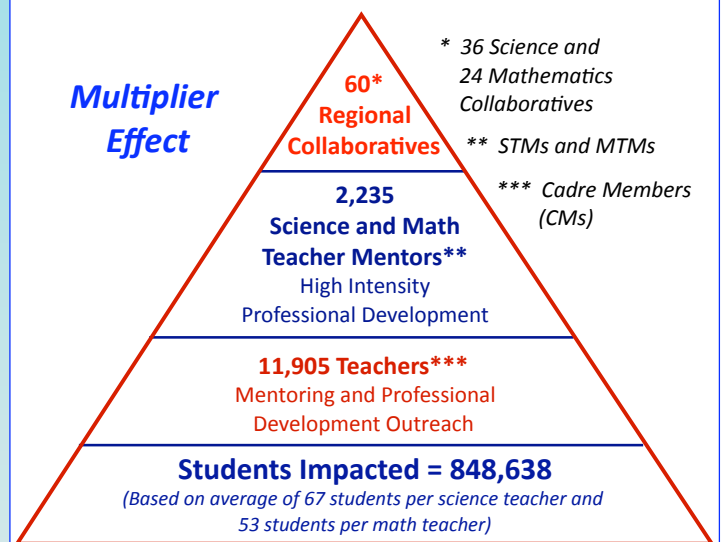
One Year Data: September 2008–July 2009  
36 Regional Science Collaboratives

The Rice University Regional Science Collaborative collected data from 2005-2008 illustrating increasing rates of scale in percent of students meeting the passing standard for two consecutive years.

### Student Achievement on TAKS Rice University Regional Collaborative



### Multiplier Effect



One Year Data: September 2008-July 2009