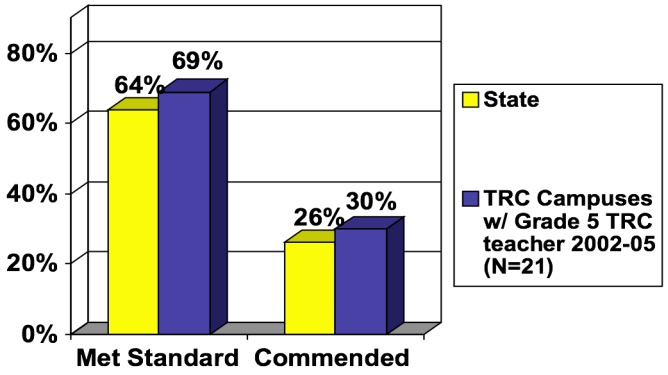
Texas Regional Collaboratives for Excellence in Science and Mathematics Teaching

RESULTS: IMPACT ON STUDENTS AND TEACHERS SERVED

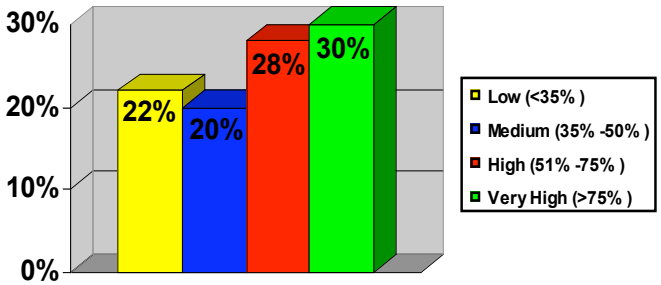
The bottom line in measuring the effectiveness of teacher professional development is the impact it has on student achievement. Research data over a three-year period indicate a positive relationship between Texas Regional Collaboratives teacher participation and student achievement.

Student Achievement on TAKS: Three-Year Analysis (2005)



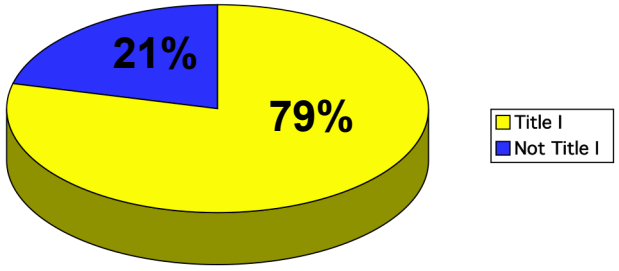
Elementary campuses with at least one Grade 5 TRC teacher each year between 2002 and 2005 scored higher on the Elementary Science TAKS (Texas Assessment of Knowledge and Skills), administered at Grade 5, than the state average. Differences in student achievement were evidenced both in the percentage of students that met state standards as well as the percentage of students that achieved a Commendable Performance rating.

Poverty Levels of Participating Schools 2005-06



Percentages based on a sample of 4,399 teachers who provided TRC campus poverty level data from September 2005 – July 2006.

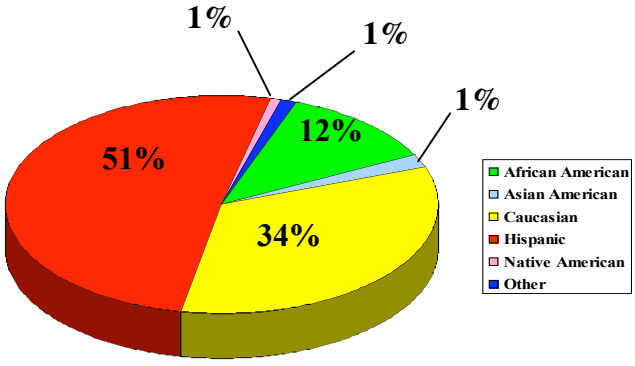
Title I Status of Participating Campuses



Based on a sample of 6,450 Teachers reporting campus Title I status from September 2005 - July 2006

Student demographics on TRC campuses are representative of the demographics of 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 lunches.

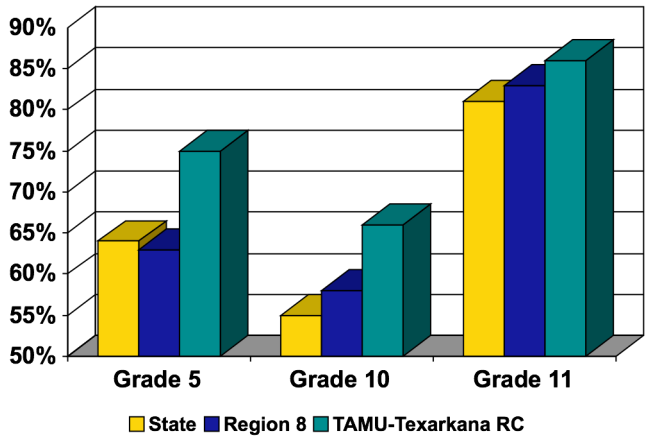
Ethnicity of Students Served by Collaborative Teachers



Based on actual classroom data reported by 5,246 teachers from September 2005 - July 2006.

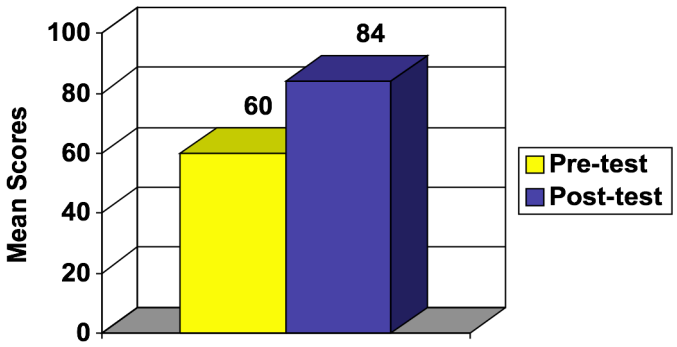
Passing percentages for TRC campuses on the state standardized test exceed state and regional averages. Data from TAMU - Texarkana Regional Collaborative campuses demonstrate comparatively higher TAKS scores in every grade in which the Science TAKS was administered in 2005.

Student Achievement on TAKS (2005)
TAMU-Texarkana Regional Collaborative



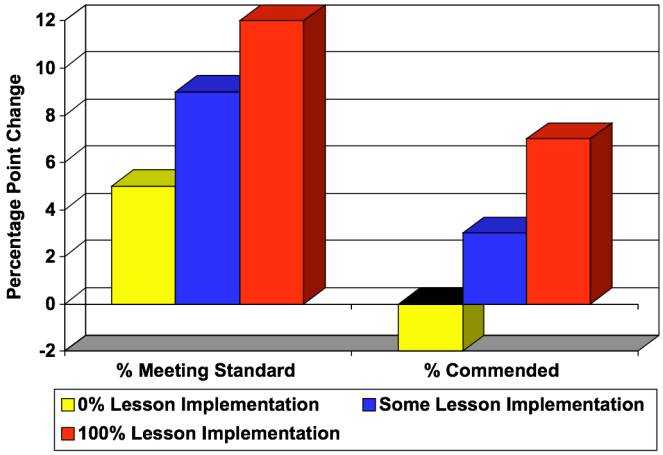
Teacher science content tests correlate with the science TEKS. Science Teacher Mentors complete a test prior to and again following 105 contact hours of professional development. The graph below summarizes data from 21 different tests of science content knowledge administered to classroom teachers from Regional Collaboratives across the state. Test content covered a range of topics including physics, chemistry, biology, earth science, and science process skills and was determined based on the professional development needs of teachers in each region.

Impact on Teachers: Science Content Knowledge Gains (2005-06)

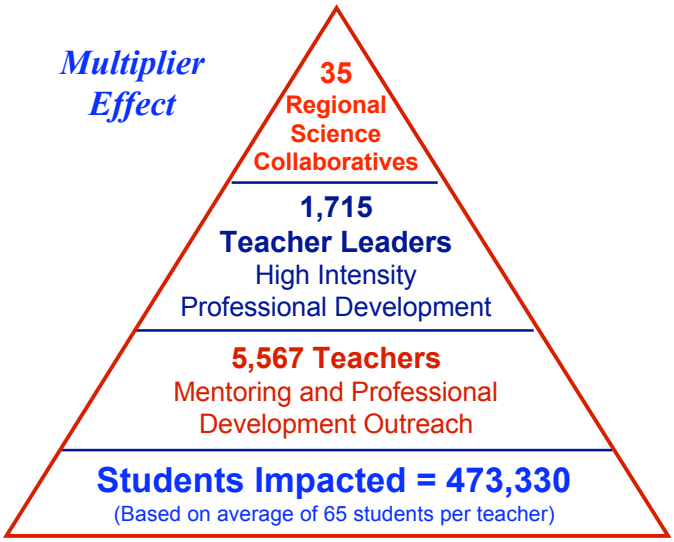


Improvement on Elementary TAKS passing rates and commended rates from 2004 to 2005 was directly correlated to implementation of Bridging II TAKS lessons in Round Rock ISD schools that participated in the ACC Regional Collaborative. Bridging II TAKS curriculum training is a cornerstone of TRC professional development across the state.

Relationship Between Bridging II TAKS Curriculum and Elementary TAKS (2004-05)



Multiplier Effect



One Year Data: September 2005 - July 2006 (Science)