Texas Regional Collaboratives for Excellence in Science and Mathematics Teaching

Program Summary
TEA Final Report

2006 – 2007 Grant

For additional information regarding the Texas Regional Collaboratives, please contact Kamil A. Jbeily, Executive Director, at kjbeily@mail.utexas.edu or Carol Fletcher, Assistant Director, at carol.fletcher@mail.utexas.edu. View the TRC website at www.theTRC.org.

Texas Regional Collaboratives for Excellence in Science and Mathematics Teaching
Program Summary/TEA Final Report
2006-07 Grant

TRC Mission

The mission of the Texas Regional Collaboratives (TRC) is to provide Texas science teachers with support systems of sustained and high intensity professional development and mentoring to assist them in the implementation of the Texas Essential Knowledge and Skills (TEKS). Our programs equip teachers with the knowledge and skills to engage all their students in meaningful science learning experiences, and prepare them for success on the Texas Assessment of Knowledge and Skills (TAKS), in college and in their future careers.

Program Description

The TRC has three basic components of professional development. First, **Instructional Team Members**, or **ITMs**, from each Regional Collaborative are assembled to provide training to classroom teachers. Instructional Teams ideally consist of professors of Science and Science Education, Science Specialists and Master Teachers in each region. **Professional Development Academies (PDAs)** are provided by the TRC to ITMs from across the state to focus instruction on the priorities set by the Texas Regional Collaboratives and the Texas Education Agency and to improve the quality and effectiveness of professional development provided to teachers. PDAs enhance the knowledge and skills necessary to develop, sustain, and facilitate high quality Professional Development Programs in each region.

Second, each Regional Collaborative develops a **Professional Development Program (PDP)** that addresses both the TRC and TEA priorities for the year and the unique needs of teachers in their region. The PDP is provided to a network of **Science Teacher Mentors (STMs)** from multiple districts in each region. A minimum of 25 STMs from each Regional Collaborative is required, but several Collaboratives serve more than double that number. The PDP consists of training to improve teacher science content knowledge, instructional skills, classroom practice and leadership capacity. STMs receive an average of 105 contact hours of professional development in these areas. Through their participation in the TRC, STMs also receive the instructional materials necessary to implement the hands-on inquiry based lessons that they have experienced in their classrooms.

Through their experiences with the Regional Collaboratives, STMs become true leaders in science education in their schools and districts. To maximize the investment made in these individuals, STMs are required to mentor additional teachers, termed **Cadre Members (CMs)**, throughout the year, and serve as resources for improving student experiences in science both regionally and statewide. Using this multiplier effect, the TRC is able to scale up the number of teachers served across the state at a relatively

low cost. Some mentoring occurs informally through the sharing of ideas and expertise on a campus level, team teaching, and coaching. In addition, many STMs provide formal training and outreach through workshops on topics such as Bridging II TAKS, 5E lesson planning and implementation, aligning instruction and assessment to the TEKS and TAKS, and other more specific locally based training. This mentoring model gives STMs an opportunity to grow professionally as leaders while remaining classroom teachers. Such professional growth is not often encouraged within the confines of the traditional limitations of school culture. This fact makes participation in the TRC especially valuable to experienced teachers who wish to improve their knowledge, skills, and leadership without leaving the classroom. Cadre Members receive an average of 12 documented hours of mentoring, training, and support. Many individual teachers that participated as CMs during the 2005-06 project year chose to increase their level of commitment and become STMs for the 2006-07 program.

Each of these components contributes to the overall goal of improving the quality and rigor of classroom science instruction for P-12 students.

TRC Network

During the 2006-07 grant period, the TRC issued subawards to support **35 Regional Science Collaboratives and 20 Regional Mathematics Collaboratives** across the state. Each Regional Collaborative consisted of a partnership among numerous organizations and stakeholders with a vested interest in quality science instruction including institutes of higher education, school districts, charter schools, private schools, Education Service Centers (ESCs), and business and industry. Science Regional Collaboratives' grantees are listed below by fiscal agent.

Science Regional Collaboratives

1. Region 1 Collaborative / Edinburg
2. UT-Brownsville Regional Collaborative / Brownsville
3. UT-Pan American Regional Collaborative / Edinburg
4. TAMIU Regional Collaborative / Laredo
5. TAMU-Corpus Christi / ESC 2 Regional Collaborative / Corpus Christi
6. Region 3 Collaborative / Victoria
7. Region 4 Collaborative / Houston
8. Lake Houston Regional Collaborative / Humble
9. Rice University Regional Collaborative / Houston
10. UH-Clear Lake / EIH Regional Collaborative / Houston
11. Galveston County Regional Collaborative / Galveston
12. Region 5 Collaborative / Beaumont
13. TAMU-College Station Regional Collaborative /College Station
14. Region 7 Collaborative / Kilgore
15. Region 8 Collaborative / Mount Pleasant
16. TAMU-Texarkana Regional Collaborative / Texarkana
17. Region 9 Collaborative / Wichita Falls
18. Region 10 Collaborative / Richardson

19. UT-Dallas Regional Collaborative / Dallas
20. University of Dallas Regional Collaborative / Irving
21. Region 11 Collaborative / Fort Worth
22. University of North Texas Regional Collaborative / Denton
23. North Central Texas College Regional Collaborative / Gainesville
24. Region 12 Collaborative / Waco
25. Region 13 Collaborative / Austin
26. Capital City Regional Collaborative / Austin
27. ACC Regional Collaborative / Austin
28. Region 14 Collaborative / Abilene
29. Region 15 Collaborative / San Angelo
30. Region 16 Collaborative / Amarillo
31. Region 17 Collaborative / Lubbock
32. Region 18 Collaborative / Midland
33. Region 19 Collaborative / El Paso
34. Region 20 Collaborative / San Antonio
35. OLLU Regional Collaborative / San Antonio

Establishing Mathematics Regional Collaboratives

Each year, the Texas Education Agency and the Texas Regional Collaboratives work in partnership to develop specific targets and goals for statewide professional development. During the 2006-07 funding period, the Texas Education Agency charged the Texas Regional Collaboratives with the responsibility of establishing Mathematics Regional Collaboratives. The TRC implemented a Request for Application (RFA) process specifically for mathematics to competitively select partnerships that could support implementation of the TEA developed mathematics professional developed modules cited in Table 1. Mathematics Regional Collaboratives were charged with disseminating training in these modules to as many teachers across the state of Texas as possible. All applicants were required to include Instructional Team Members who had attended Trainer of Trainers (TOT) workshops for the cited modules. Typically, training provided to teachers mirrored the TOT in length, but each Collaborative was given the latitude to extend the training to additional days if necessary. No TOT was provided for Mathematics for English Language Learners (MELL), so Collaboratives were encouraged to infuse MELL training into existing module workshops.

Table 1. Mathematics Modules

Module	Components (TOT days)
TMT^3 Teaching Mathematics TEKS through Technology	Grade 6-8 (2 days) Algebra I (2 days) Algebra II (2 days) Geometry (2 days)
MTR Mathematics TEKS Refinement	K-2 (2 days) 3-5(2 days) 6-8 (2 days) 9-12 (2 days)
MTC Mathematics TEKS Connections	K-2 (2 days) 3-5 (2 days) 6-8 (2 days) 9-12 (2 days) Administrator (1/2 day)
MAP Mathematics Achievement Project	Algebra II (2 days) Geometry (2 days)
MELL Mathematics for English Language Learners	All-in-one (no TOT – conference July 6-7)

Mathematics Regional Collaboratives grantees are listed below by fiscal agent.

<u>Mathematics Regional Collaboratives</u>

1. Region 1 Mathematics Collaborative
2. Region 2 Mathematics Collaborative
3. Region 3 Mathematics Collaborative
4. Region 4 Mathematics Collaborative
5. Region 5 Mathematics Collaborative
6. Region 7 Mathematics Collaborative
7. Region 8 Mathematics Collaborative
8. Region 9 Mathematics Collaborative
9. Region 10 Mathematics Collaborative
10. Region 11 Mathematics Collaborative
11. Region 12 Mathematics Collaborative

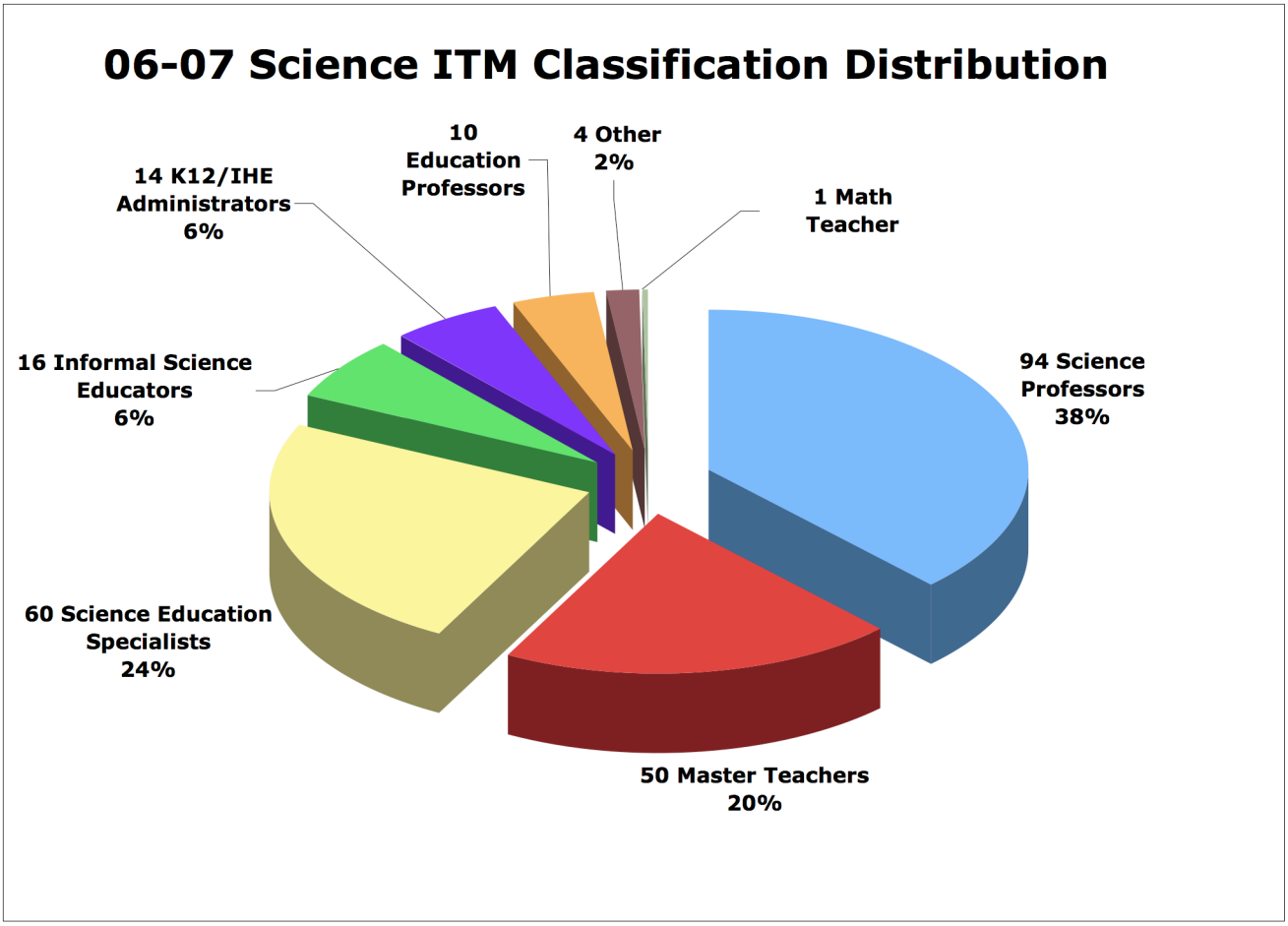
12. Region 13 Mathematics Collaborative
13. Region 14 Mathematics Collaborative
14. Region 15 Mathematics Collaborative
15. Region 16 Mathematics Collaborative
16. Region 18 Mathematics Collaborative
17. Region 19 Mathematics Collaborative
18. Region 20 Mathematics Collaborative
19. OLLU Mathematics Regional Collaborative
20. Texas Tech Mathematics Regional Collaborative

During the 2006-07 grant period, **33 Institutions of Higher Education** partnered with Regional Collaboratives across the state to provide high quality science and mathematics teacher professional development. While many of these were fiscal agents as noted above, still others partnered with ESCs to provide coursework and training to teachers.

1. Amarillo College
2. Angelo State University
3. Austin Community College
4. Baylor University
5. Dallas Baptist University
6. Hardin-Simmons University
7. Lee College
8. Midland College
9. Midwestern State University
10. North Central Texas College
11. Our Lady of the Lake University
12. Rice University
13. Stephen F. Austin University
14. Texarkana College
15. Texas A&M – College Station
16. Texas A&M – Commerce
17. Texas A&M – Corpus Christi
18. Texas A&M – Galveston
19. Texas A&M International University
20. Texas A&M – Texarkana
21. Texas Christian University
22. Texas State Technical College
23. Texas Tech University
24. University of Dallas
25. University of Houston – Clear Lake
26. University of North Texas
27. University of Texas – Austin
28. University of Texas – Brownsville
29. University of Texas – Dallas
30. University of Texas – El Paso
31. University of Texas – Pan American
32. University of Texas – San Antonio
33. University of Texas Medical Branch

Instructional Team Members for Science Collaboratives from these colleges and universities provided training to P-12 teachers and served as content experts. In addition to faculty members in higher education, other ITMs included informal science providers such as museum staff members, education service center science and mathematics specialists, and K-12 science and mathematics administrators. In science, the greatest number of ITMs were science professors (38%) followed by science specialists at ESCs (24%). Science Teacher Mentors composed 20% of the ITM pool and usually trained their colleagues in their areas of particular expertise. Science education professors, typically from a college of education, comprised 4% of ITMs with the rest distributed among K-12/IHE administrators, informal science educators, and professors of mathematics.

Figure 1: Distribution of Science ITMs 2006-2007



Teachers and Students Served

In addition to these higher education and ESC partners, teachers from **853 school districts and charter schools** and **2341 campuses** participated in Texas Regional Collaboratives science program. The Mathematics Regional Collaboratives served teachers in **957 districts and charter schools** representing **2,663 campuses**. A list of all participating districts is located in the appendix. During the 2006-07 project year, a total of **7,180 science educators and 8,129 mathematics educators** were served by the Texas Regional Collaboratives. Information on educators and students served was generally collected by having each educator complete a TRC Participant Data Form (see appendix). In some cases, participants who attended workshops did not complete an entire form, but only provided information such as their name, campus, district and grades or subjects taught. Based on an average student/teacher ratio of 65.4 students per TRC teacher, approximately **469,572 students** have been impacted by TRC professional development. Mathematics teachers averaged 58.1 students per teacher for a total impact of **472,295 students**. A breakdown of teacher demographics is described in Tables 2-10 while school and student demographics are described in tables 10-13.

Table 2. Teacher Gender

	Science		Math	
	Number	Percent	Number	Percent
Male	1,040	14%	1,091	13%
Female	6,140	86%	7,038	87%

Table 3. Teacher Ethnicity

	Science		Math	
	Number	Percent	Number	Percent
African American	317	4%	346	4%
Asian American	116	2%	105	1%
Caucasian	5,157	71%	5,972	72%
Hispanic	1,442	20%	1,760	21%
Native American	48	1%	50	1%
Other	139	2%	95	1%

Figure 2. TRC Science Teacher Ethnicity

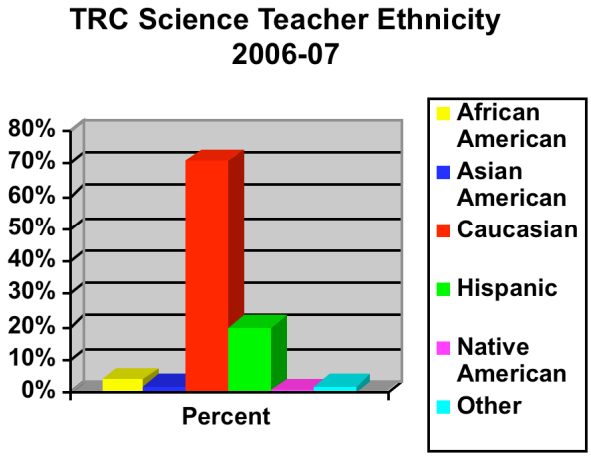


Figure 3. TRC Math Teacher Ethnicity

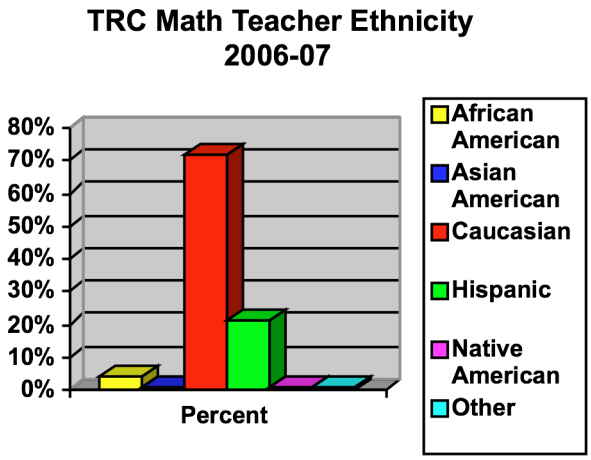


Table 4. Degree

	Science		Math	
	Number	Percent	Number	Percent
High School	167	2%	359	4%
Bachelor	5,481	76%	6,300	75%
Master	1,548	21%	1,706	20%
Doctorate	52	1%	47	1%

Table 5. Teaching Level

	Science		Math	
	Number	Percent	Number	Percent
Elementary	4,940	65%	4,671	53%
Middle School	1,266	17%	1,572	18%
High School	881	12%	1,653	19%
Univ/College	10	0%	12	<1%
Admin	130	2%	192	2%
Specialist/Facilitator	18	0%	340	4%
ESC	118	2%	38	<1%
Informal Ed	19	0%	0	0
Education Student	117	2%	254	3%
Consultant	6	0%	7	<1%
Other	50	1%	72	1%

Figure 4. TRC Science Teacher Level

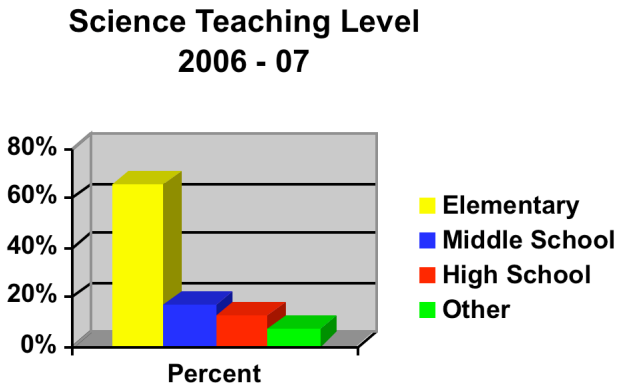


Figure 5. TRC Math Teacher Level

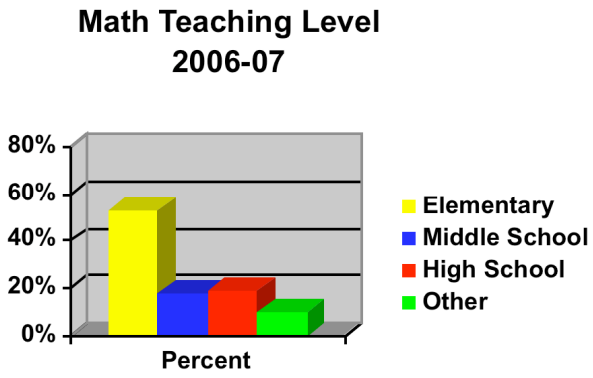


Table 6. Highly Qualified

	Science		Math	
	Number	Percent	Number	Percent
Yes	5,598	85%	6,374	84%
No	131	2%	170	2%
Not Sure	861	13%	1,097	14%

Table 7. Grades Currently Taught

Science					
	Number	Percent		Number	Percent
PreK	167	2%	*6th*	648	6%
K	766	7%	*7th*	625	6%
1st	797	7%	*8th*	650	6%
2nd	908	8%	*9th*	556	5%
3rd	1,071	10%	*10th*	652	6%
4th	1,279	12%	*11th*	660	6%
5th	1,454	13%	*12th*	591	5%

Math					
	Number	Percent		Number	Percent
PreK	139	1%	*6th*	832	6%
K	870	6%	*7th*	861	6%
1st	956	7%	*8th*	920	7%
2nd	1,003	7%	*9th*	1,248	9%
3rd	1,204	9%	*10th*	1,261	9%
4th	1,087	8%	*11th*	1,193	9%
5th	1,015	7%	*12th*	1,000	7%

Table 8. Subject Currently Taught - Science

Science		
	Number	Percent
Elementary Science	4,256	42%
Middle School Science	1,157	11%
Health	479	5%
IPC	332	3%
Biology	342	3%
Chemistry	281	3%
Physics	213	2%
GMO	16	0%
AP Science	105	1%
Mathematics	143	1%
Other Science	1,450	14%
Other	1,441	14%

Table 8. Subject Currently Taught - Math

Math		
	Number	Percent
Elementary Math	4,343	44%
Middle School Math	1,548	16%
Algebra 1	1,053	11%
Algebra 2	623	6%
Geometry	752	7%
Calculus	139	1%
AP Math	108	1%
Other Math	478	5%
Other	933	9%

Table 9. Campus Type

	Science		Math	
	Number	Percent	Number	Percent
Public	2,153	95%	2,484	94%
Private	65	3%	36	1%
Alternative	20	1%	50	2%
Charter	36	2%	68	3%

Table 10. Poverty Level

	Science		Math	
	Number	Percent	Number	Percent
Low (<35%)	349	16%	372	16%
Medium (35%-50%)	408	19%	569	24%
High (51%-75%)	688	32%	768	32%
Very High (>75%)	676	32%	2,360	28%

Figure 6. TRC Science Free Lunch

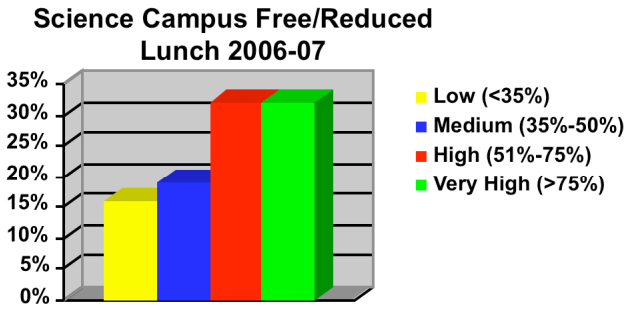


Figure 7. TRC Math Free Lunch

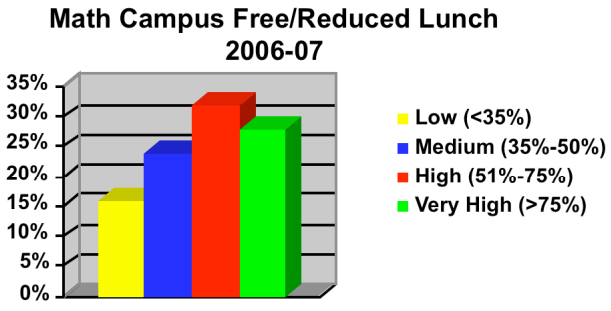


Table 11. Title I Status

	Science		Math	
	Number	Percent	Number	Percent
YES	1,716	72%	1.833	67%
NO	662	28%	883	33%

Table 12. Student Ethnicity

	Science		Math	
	Number	Percent	Number	Percent
African American	27,489	14%	46,848	12%
Asian American	5,088	3%	6,388	2%
Caucasian	68,561	34%	173,391	43%
Hispanic	94,936	48%	168,932	42%
Native American	846	0%	1,494	<1%
Other	2,008	1%	2,430	1%

Figure 8. TRC Science Student Ethnicity

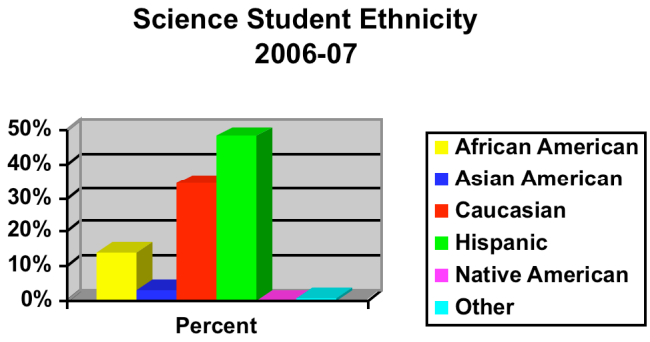
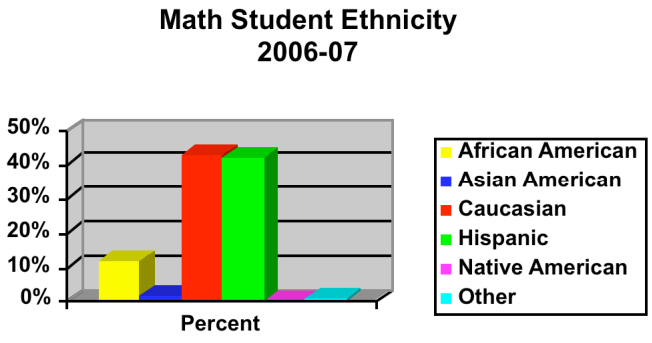


Figure 9. TRC Math Student Ethnicity



Project Impact

The total number of **Science Teacher Mentors** served in 2006-07 was **1,336**. Each STM received an average of 100 contact hours of professional development. The total number of **CMs** served was **5,288** with each CM receiving an average of 15 contact hours.

The **total number of contact hours** provided by the TRC was **220,233**. This included college credit hours which many teachers earned through taking coursework at the Institutions of Higher Education listed previously. Such college courses primarily focus on improving teachers' science content knowledge and are taught by science and science education professors from across the state. Many teachers are able to use their involvement in the TRC to earn a master's degree from institutions that work in close collaboration with the Regional Collaboratives such as Texas Tech, UT-Brownsville, UT-Pan American, Texas A&M-Texarkana, and Our Lady of the Lake University.

In addition to increasing the overall number of teachers served by the TRC, the Texas Education Agency also placed a high priority on continuing training and dissemination on the Bridging II TAKS modules funded by TEA and developed by the Texas Science Center at Education Service Center Region 4. TRC training addressed both Module 1: Light and Optical Systems and Module 2: Tools for Exploring Matter. Both modules focus on the Texas Essential Knowledge and Skills (TEKS) for Grades K-8 with particular emphasis on physical science concepts. A total of **1,731 educators received training on Bridging II TAKS (BIITAKS)**. TRC funding was also used to **supply trained teachers and campuses with the science equipment and materials they needed to teach these lessons** as well. This was one of the most attractive aspects of TRC participation both for STMs as well as CMs.

Professional development was also offered by every Regional Science Collaborative in GLOBE (Global Learning and Observations to Benefit the Environment). GLOBE is a worldwide hands-on, primary and secondary school-based science and education program. GLOBE promotes and supports students, teachers and scientists to collaborate on inquiry-based investigations of the environment and the Earth system working in close partnership with NASA and NSF Earth System Science Projects (ESSPs) in study and research about the dynamics of Earth's environment. GLOBE brings together students, teachers and scientists through the GLOBE Schools Network in support of student learning and research. Students collect data related to soils, hydrology and the atmosphere and share this data through worldwide research studies. Marsha Willis, Professional Development Coordinator for the Texas Regional Collaboratives, serves as the Texas Coordinator for the GLOBE program. Through the TRC**, 2,027 Texas teachers were trained to implement GLOBE** in their classrooms and schools.

The Texas Education Agency also requested that the TRC provide training across the state on the Texas Science Diagnostic System (TSDS). The TSDS is a state supported, web-based test bank aligned to the TEKS in Grades 4-8, Biology, and IPC. During the 2006-07 grant period, **1,237 educators were trained to use TSDS**. The TRC State

Office also provided technical assistance to numerous teachers and school districts across the state regarding TSDS and how they could access the services.

Teacher Impact

The TRC program evaluation focuses on three major components:

- Impact on teacher practice and instructional skills
- Impact on teacher content knowledge
- Impact on student achievement

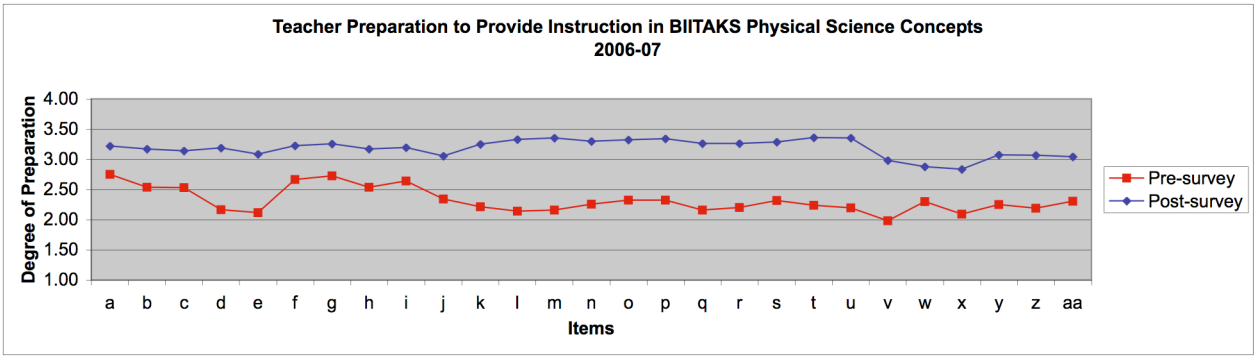
Instructional Skills

To assess statewide the impact of TRC training on instructional skills, the TRC developed a 27-item instrument which explored how well prepared these teachers felt before and after BIITAKS training to address the TEKS-based content of the lessons in an inquiry manner in their classrooms.

The instrument was administered as a pre-test prior to their training and again as a post-test following the training (see Appendix for instrument). The instrument focused specifically on the science concepts and instructional skills addressed in the Bridging training and assessed each teacher's level of preparation to implement instruction based on these concepts and skills where: 1=not adequately prepared; 2=somewhat prepared; 3=fairly well prepared, and 4=very well prepared. Teachers rated their level of preparation both before and after training.

Teachers showed significant gains after training in their level of preparation to implement lessons covering the identified TEKS using the 5E model. Figure 12 displays improvements by item with the average item response going from 2.32 to 3.19.

Figure 12: Improvements in Teacher Preparation to Provide Instruction in BIITAKS Physical Science Concepts by Item

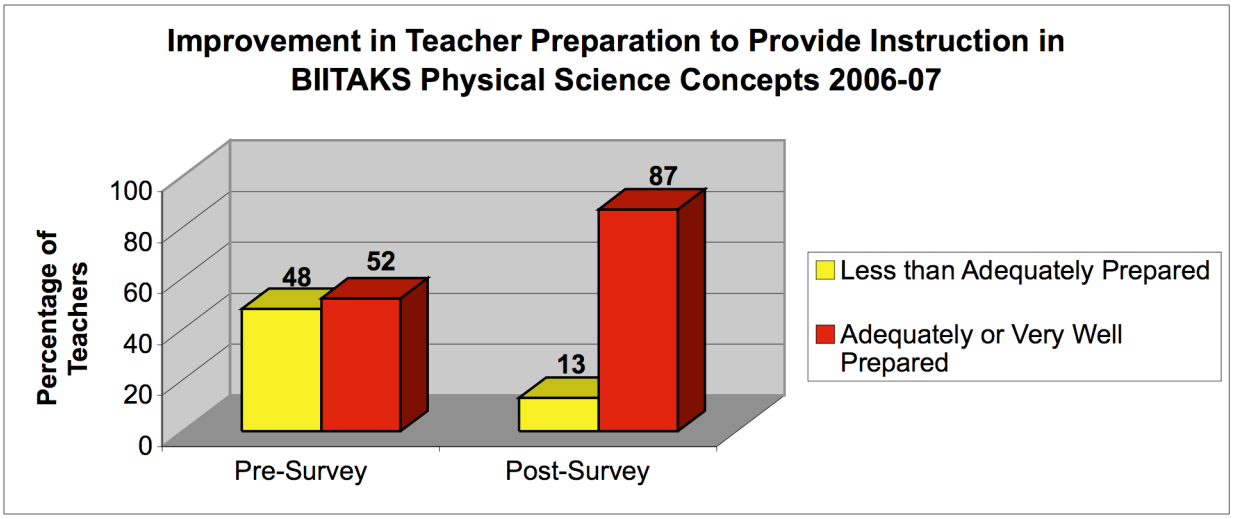


As evidenced by Figures 13 and 14, it is clear that the training provided to teachers had a major impact on their perceptions of their level of preparation to teach the physical science content addressed in Bridging II TAKS and to use the 5E lesson planning model described in Bridging II TAKS to convey this information. This is not surprising given the limited experience most elementary teachers have with learning physical science content and the discomfort they often have with teaching science without the textbook.

The 5E Model is based on learning cycle and cognitive research that emphasizes student engagement, concrete experiences prior to abstract representations, and applications of content knowledge in a variety of contexts. In general, while 48% of respondents felt less than adequately prepared prior to training to teach the content specified for their grade level and to use the 5E lesson model, only 13% continued to feel that way after the training. Likewise, only 52% described themselves as adequately or very well prepared prior to training, but 87% felt adequately or very well prepared after the training.

Another factor that likely influenced teachers' level of preparation may have been that the TRC supported their training and its subsequent classroom implementation with science instructional materials such as scales, safety goggles, radiometers, diffraction grating, beakers, prisms, etc. TRC funds were utilized to provide STMs and CMs with the materials needed to implement the Bridging II TAKS lessons. Given the traditional lack of science equipment in elementary classrooms, this access to instructional materials made a tremendous difference in the capacity to teach standards-based, hands-on science in many classrooms.

Figure 13: Improvement in STM Preparation to Teach Science Content in BIITAKS

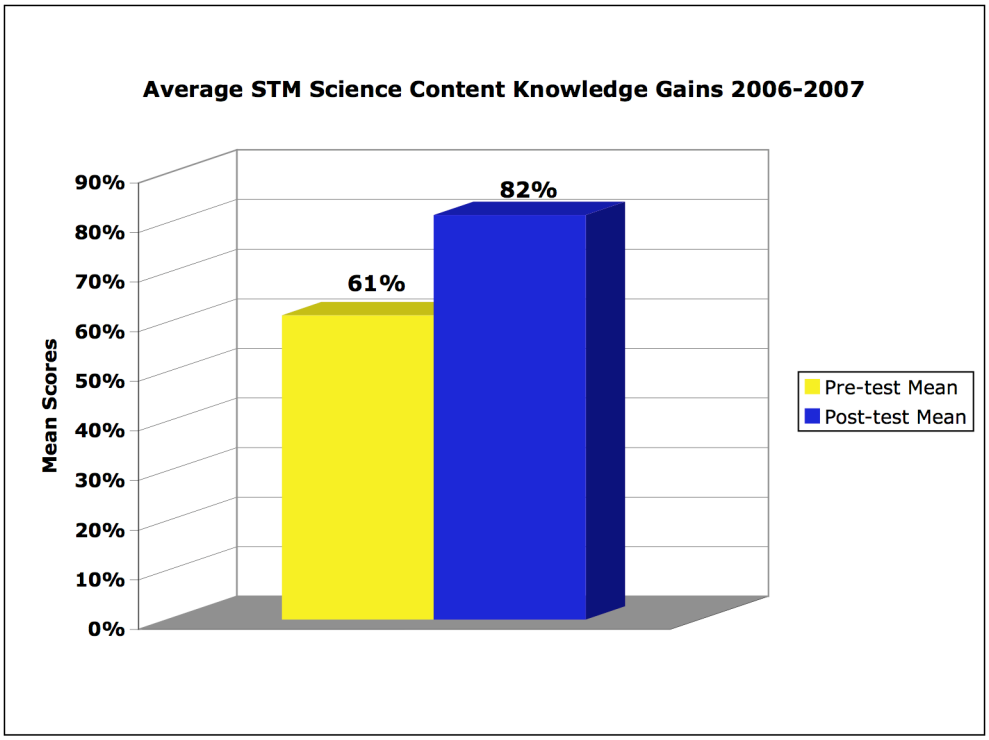


Teacher Content Knowledge

One of the primary goals of the Texas Regional Collaboratives is to improve the science content knowledge of participating teachers. Each Regional Collaborative develops a Professional Development Program to address the unique needs of the teachers who participate in that region. Regional Collaboratives may have a slightly different focus each year depending on the specific grade level of teachers that participate and a regional needs assessment. Needs assessments generally include an examination of student TAKS scores as well as local data such as district benchmarks to identify areas in need of instructional improvement.

Twenty-nine Regional Collaboratives developed formal procedures for identifying changes in teacher science content knowledge as a result of TRC training. These Collaboratives administered 42 different tests in a pre-test/post-test format. Test content covered a range of topics including physics, chemistry, biology, earth science, and science process skills. The impact of TRC professional development on the content knowledge of teachers is summarized in Figure 14. Pre-test mean scores and post-test mean scores were averaged for all exams resulting in a mean scores of 61% for all pre-tests as compared to a mean score of 82% for all post-tests.

Figure 14: Improvements in STM Science Content Knowledge



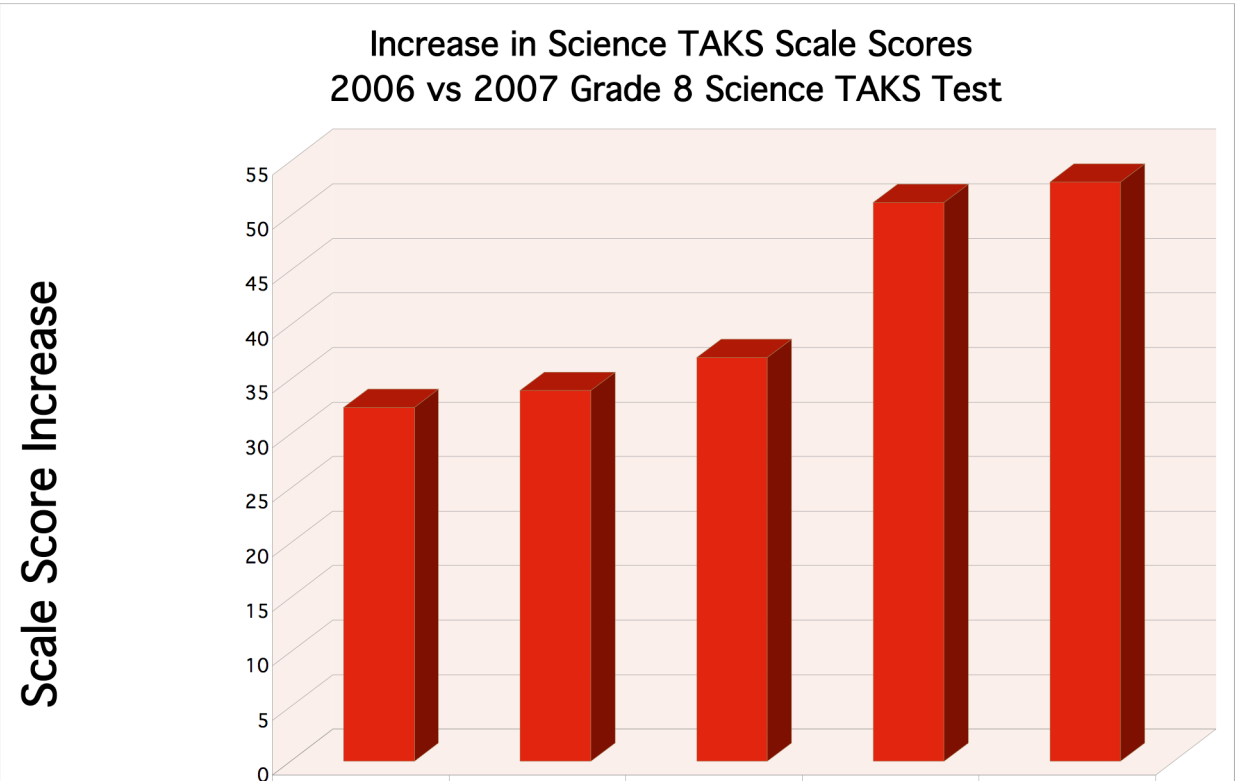
Student Impact

One of the most difficult tasks for professional development evaluators is to determine the effect teacher professional development has on student achievement. This is particularly challenging for a large statewide organization that serves teachers in over 500 independent school districts, charter schools, and private schools. With the implementation of the Elementary Science Texas Assessment of Knowledge and Skills (TAKS) test however, evaluators at least have a common metric by which to measure statewide student performance. This test, which is administered at Grade 5, measures student understanding of the TEKS for Grades 2-5. Test data is available only on a campus, district, regional, and state level. Test scores for individual students or students clustered within individual teachers are not available.

For the 2006-2007 school year, eighteen individual Regional Collaboratives collected data on student achievement. Because this data cannot be accurately combined across Regional Collaboratives, selected examples are included in this report. In general, analysis of campus TAKS scores where TRC teachers were employed compared to campuses where no TRC teachers were employed indicated that students on TRC campuses outperformed students on non-TRC campuses.

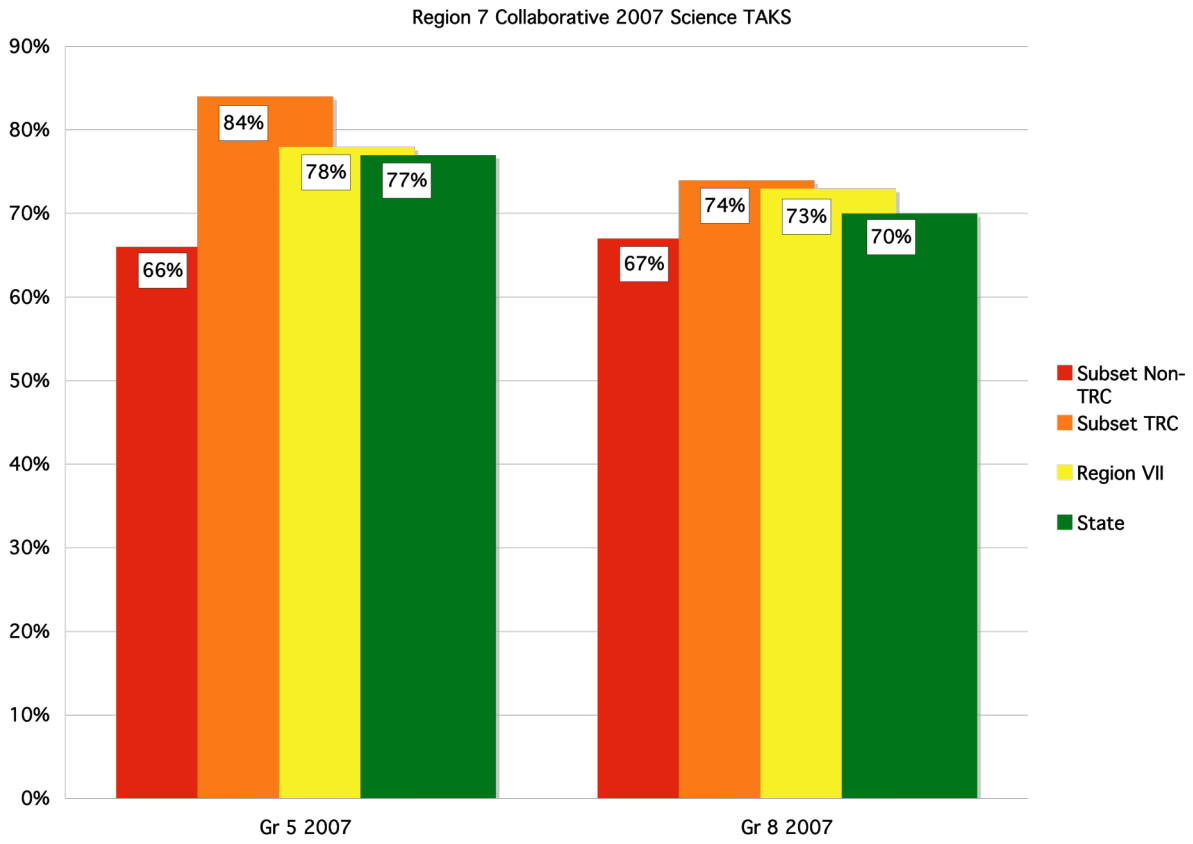
For example, in Region 8, scale score data for the Grade 8 TAKS showed Region 8 campuses with no TRC participation increased their year to year scale score by 32 points while campuses where a TRC 8th grade teacher had received at least 72 hours of training increased their scale scores by 53 points on average.

Figure 15: Region 8 Collaborative Scale Score Comparisons on Grade 8 Science TAKS



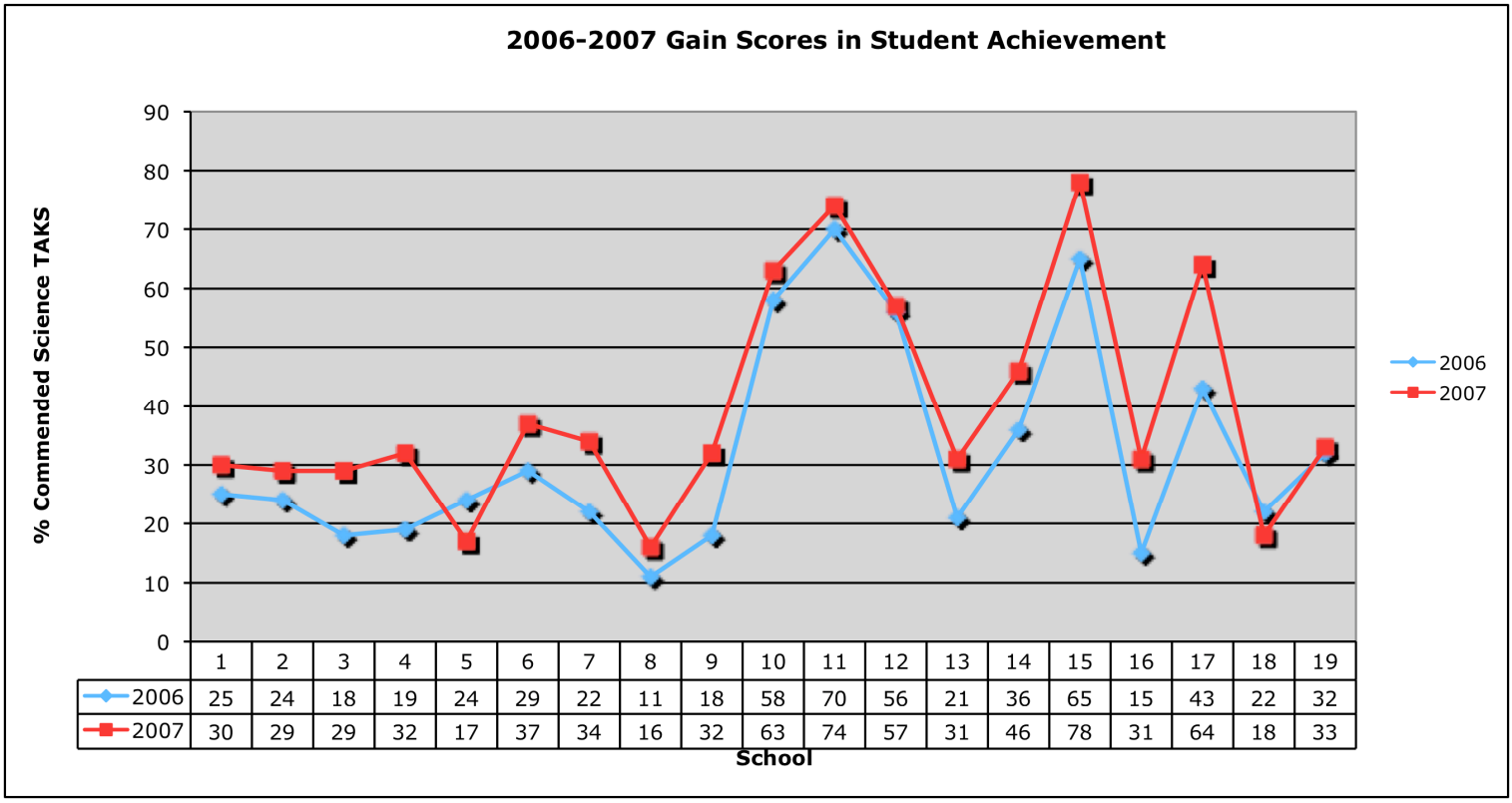
Similar results can be found by examining passing rates for campuses. In Region 7, a comparison of non-TRC campuses to TRC campuses at both Grade 5 and Grade 8 demonstrates an 18-point difference in passing rates at the elementary level and a 7 point difference in passing rates at the middle level.

Figure 16: Region 7 Collaborative Passing Rate Comparisons on Grade 5 and Grade 8 Science TAKS



The ACC Collaborative provided evidence of student achievement by presenting data across 19 schools from 2006 to 2007. Twelve of the nineteen schools below participated in the ACC Collaborative. All but two schools increased commended performance in 2007. The most appreciable gain was 21%. On average, there was an 8 percent increase across all 19 schools from 2006 to 2007.

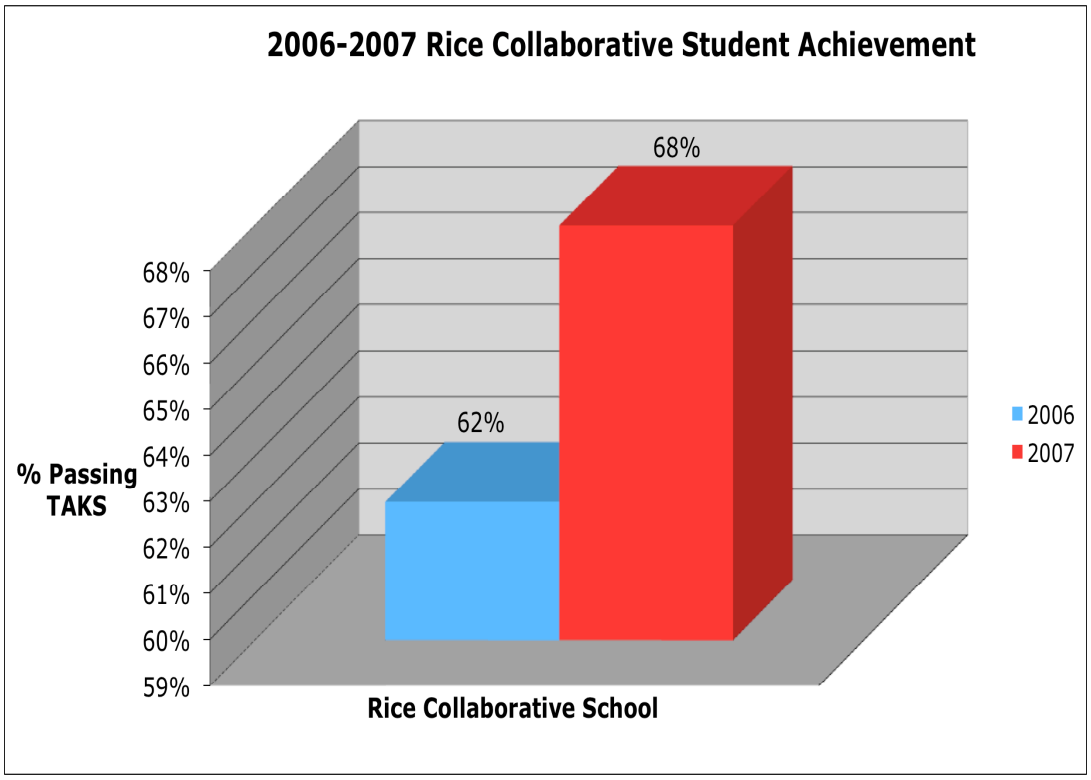
Figure 17: ACC Collaborative Elementary Percent Commended Science TAKS Comparisons



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
2006	25	24	18	19	24	29	22	11	18	58	70	56	21	36	65	15	43	22	32
2007	30	29	29	32	17	37	34	16	32	63	74	57	31	46	78	31	64	18	33

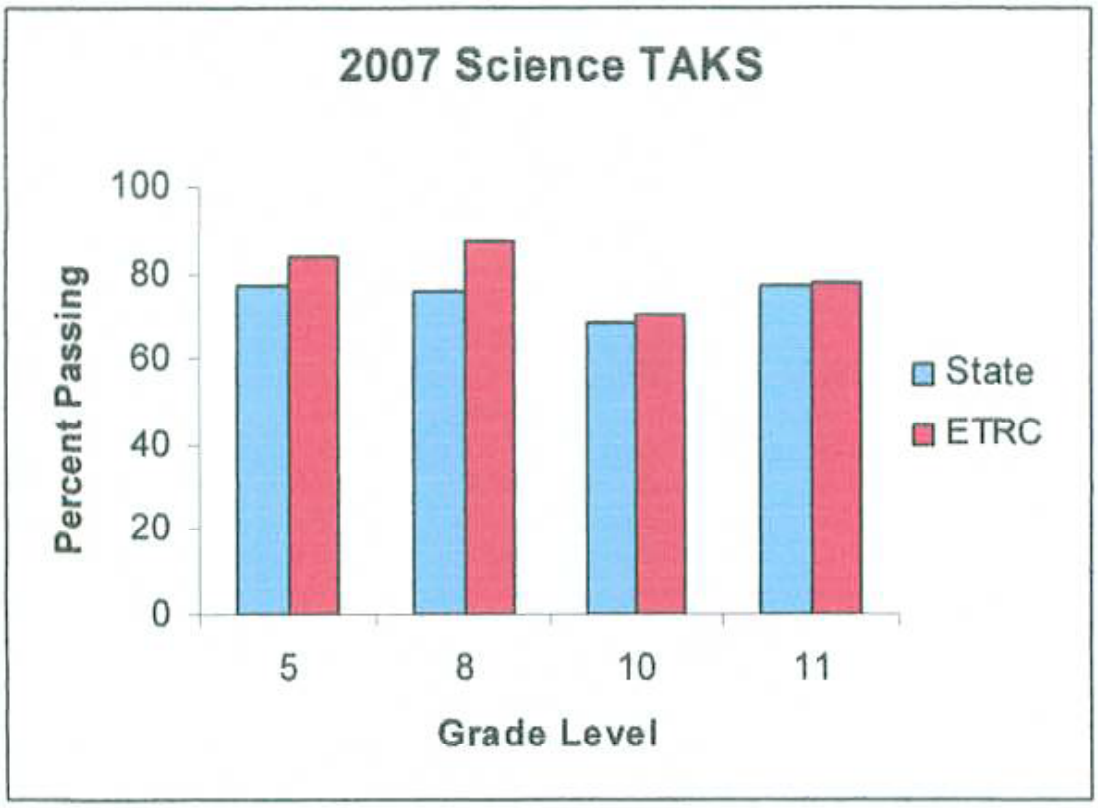
The Rice/TRC Collaborative performed a comparison of 2005-06 TAKS scores (before the campus/teacher was in TRC program) versus 2006-07 TAKS scores (after the campus/teacher had been in TRC program) for the same set of 49 campuses/teachers. The analysis indicated that the students performed statistically significantly higher in 2007 (mean = 68; $p<.01$) after the campus/teacher had been in the TRC program.

Figure 18: Rice Collaborative Passing Rate Comparisons on Science TAKS



The TAMU – Texarkana East Texas Regional Collaborative (ETRC) compared Science TAKS scores of students of ETRC teachers to State Science TAKS scores for the 5th, 8th, 10th, and 11th grades. There were appreciable differences in the 5th and 8th grades where the ETRC students out performed the comparison schools. There were marginal differences in the 10th and 11th grades where the ETRC student outperformed the comparison schools.

Figure 19: **TAMU – Texarkana East Texas *Collaborative Passing Rate Comparisons on Grade 5, 8, 10, and 11 Science TAKS***



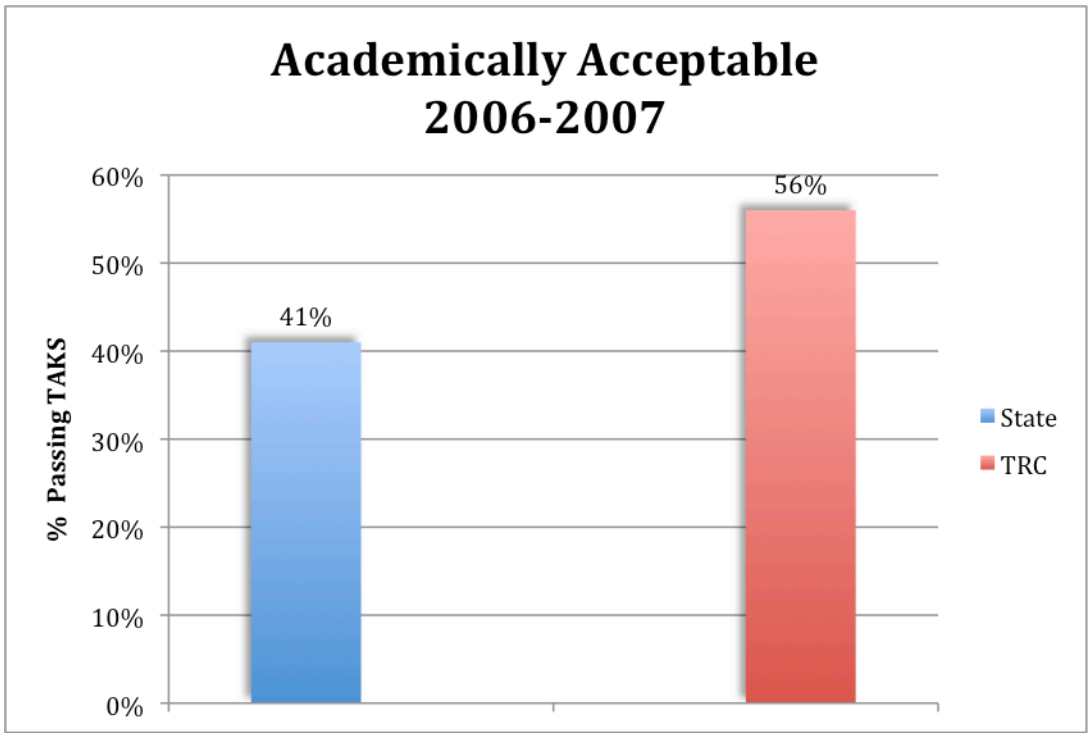
The University of Houston at Clear Lake Collaborative compared Collaborative elementary schools (n=34) to other state elementary schools (n=4290), Middle schools (n=20) to other state middle schools (n=1591), and Collaborative high schools (n=11) to other state high schools (n=1740). The scores below are for schools that have at least one teacher at the tested grade level in the TRC program.

For the elementary schools, the most appreciable difference (15 percentage points) occurred between Collaborative schools and state schools in the academically acceptable category. There was a notable seven-percentage point difference between the Collaborative and state schools in the exemplary category.

Table 13. Elementary Schools

Average	Academically Acceptable	Recognized	Exemplary
Collaborative Schools (n =34)	56%	24%	20%
State (n=4290)	41%	38%	13%

Figure 20: **University of Houston at Clear Lake** ***Collaborative Elementary School Passing Rate***

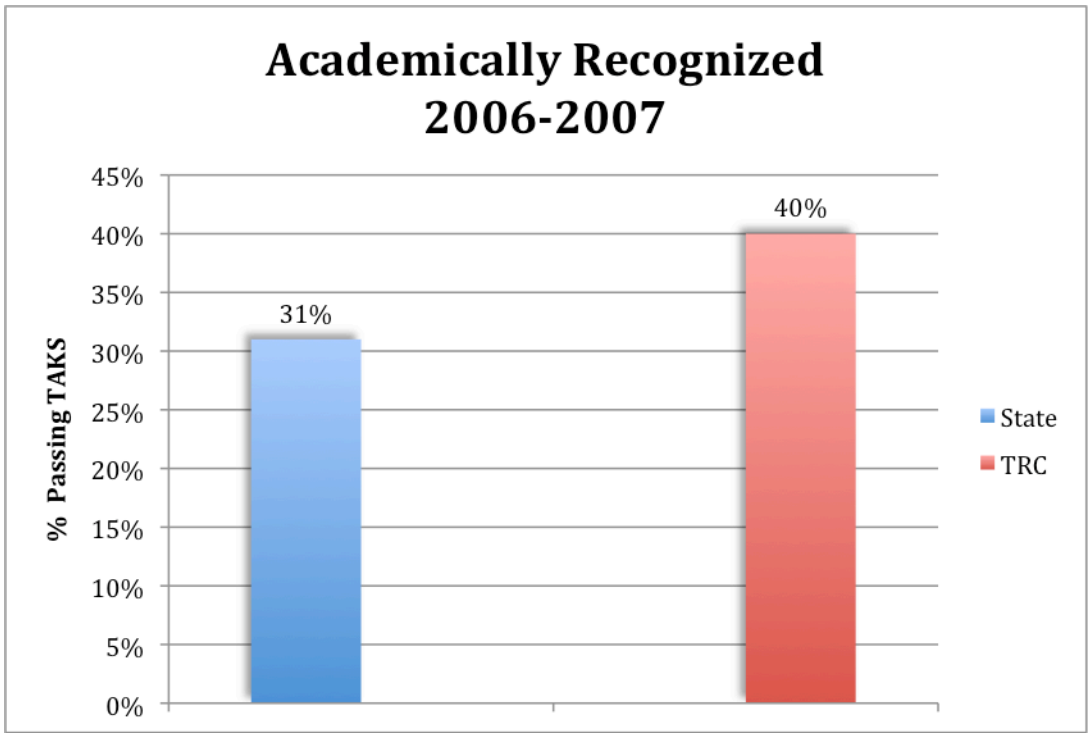


The most appreciable difference (9 percentage points) occurred between Collaborative schools and state schools in the academically recognized category.

Table 14. Middle Schools

Average	Academically Acceptable	Recognized	Exemplary
Collaborative Schools (n=20)	55%	40%	5%
State (n=1591)	56%	31%	4%

Figure 21: **University of Houston at Clear Lake *Collaborative Middle School Passing Rate***

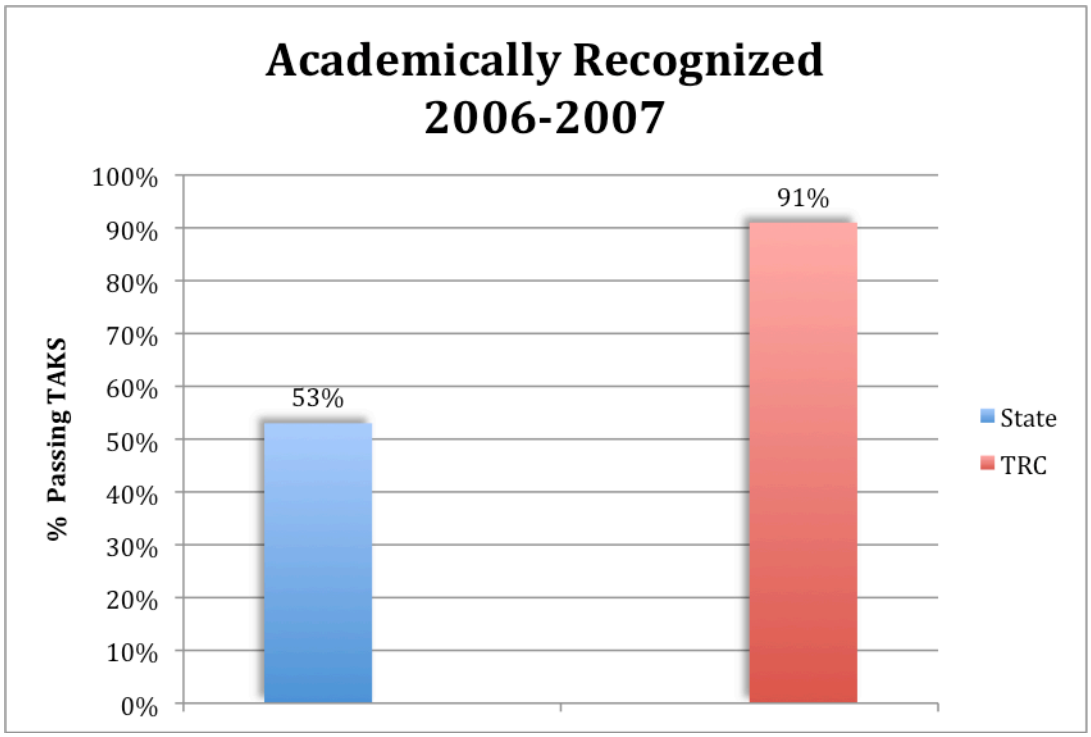


For the high schools, the most appreciable difference (38 percentage points) occurred between Collaborative schools and state schools in the academically recognized category. There was a marginal four-percentage point difference between the Collaborative and state schools in the academically acceptable category and in the exemplary category the state schools outperformed the Collaborative schools.

Table 15. High Schools

Average	Academically Acceptable	Recognized	Exemplary
Collaborative Schools (n=11)	9%	91%	0%
State (n=1740)	5%	53%	8%

Figure 22: **University of Houston at Clear Lake *Collaborative High School Passing Rate***



Another challenge in comparing student achievement data in Texas is that since the TAKS was administered in 2003, the standard for passing was gradually increased each year through 2005. Thus, comparisons of the percent passing are hindered by a lack of consistent criteria to define passing. A more valid metric for making longitudinal comparisons would be the scale score for each of these years. Unfortunately, scale score data by campus is not readily available to researchers through the Texas Education Agency.

Conclusion

The achievements of the Texas Regional Collaboratives for Excellence in Science and Mathematics Teaching during the 2006-07 funding period have been extensive. In addition to 35 existing Science Regional Collaboratives, the TRC added 20 Mathematics Regional Collaboratives across the state. Each Regional Collaborative consisted of a partnership among numerous organizations and stakeholders with a vested interest in quality science instruction including institutes of higher education, school districts, charter schools, private schools, Education Service Centers (ESCs), and business and industry. During the 2006-07 grant period, **33 Institutions of Higher Education** partnered with Regional Collaboratives across the state to provide high quality science and mathematics teacher professional development. In addition to these higher education and ESC partners, teachers from **853 school districts and charter schools** and **2341 campuses** participated in Texas Regional Collaboratives science program. The Mathematics Regional Collaboratives served teachers in **957 districts and charter schools** representing **2,663 campuses**. During the 2006-07 project year, a total of **7,180 science educators and 8,129 mathematics educators** were served by the Texas Regional Collaboratives. The total number of **Science Teacher Mentors** served in 2006-07 was **1,336**. Each STM received an average of 100 contact hours of professional development. The total number of **CMs** served was **5,288** with each CM receiving an average of 15 contact hours. The **total number of contact hours** provided by the TRC was **220,233**. This included college credit hours which many teachers earned through taking coursework at the Institutions of Higher Education listed previously. Based on an average student/teacher ratio of 65.4 students per TRC teacher, approximately **469,572 students** have been impacted by TRC professional development. Mathematics teachers averaged 58.1 students per teacher for a total impact of **472,295 students**.

Beyond numbers the Texas Regional Collaboratives has truly made a difference for many of the teachers we serve and the students they serve. TRC teachers have provided qualitative feedback attesting to the positive impact participation in the Regional Collaborative network has had on them both personally and professionally. A few particularly notable examples have been included below:

- *I found the training very valuable to visit with other teachers from across the state and see their perspectives on what is appropriate to teach, what they think should be tested, and how they interpret the TEKS. In addition to getting some good work done, I felt like I learned a lot about how my classes compare to others around the state.*

- *This was one of the most beneficial experiences of my teaching career. I have learned so very much and have made new friends and professional contacts through the process. I have certainly gained insight and confidence on writing my own test questions.*

Unfortunately, while much has been accomplished by the Texas Regional Collaboratives over the 2006-07 program year, the services provided represent only a fraction of those needed for the 135,000 elementary teachers and the 32,000 secondary

science and mathematics teachers in the state. During the 2007-08 grant period, the goal of the TRC will be to continue to scale up its efforts to reach additional teachers while maintaining a focus on the long-term and sustained professional development that is the hallmark of this program.

Appendix

District List

DISTRICTS	Science	Math
A+ and Inspired Vision	✓	
Abbott ISD		✓
Abernathy ISD	✓	✓
Abilene Christian Schools		✓
Abilene ISD	✓	✓
Academy ISD	✓	
Academy of Beaumont		✓
Academy of Careers & Technology		✓
Academy of Dallas		✓
Accelerated Intermediate/ Interdisciplinary Academy		✓
Adrian ISD		✓
Agua Dulce ISD	✓	
Alamo Heights ISD	✓	✓
Albany ISD	✓	✓
Aldine ISD	✓	✓
Aledo ISD	✓	✓
Al-Hedayah Academy	✓	✓
Alice ISD		✓
Alief ISD	✓	✓
Allen ISD		✓
Alpha Charter School		✓
Alpine ISD	✓	✓
Alto ISD	✓	✓
Alvarado ISD		✓
Alvin ISD	✓	✓
Alvord ISD		✓
Amarillo ISD	✓	✓
Ambassadors Preparatory Academy	✓	
Amigos Pr Vida		✓
Anahuac ISD	✓	
Anderson-Shiro ISD	✓	
Andrews ISD	✓	✓
Angleton ISD		✓
Anna ISD		✓
Anson ISD	✓	✓
Anthony ISD		✓
Anton ISD		✓
Aransas County ISD	✓	✓
Aransas Pass ISD	✓	✓
Archdiocese of Galveston/Houston	✓	
Archdiocese of San Antonio		✓

DISTRICTS	Science	Math
Archer City ISD		✓
Argyle ISD		✓
Arlington Classics Academy		✓
Arlington ISD		✓
Arp ISD		✓
Aspermont ISD		✓
Athens ISD		✓
Atlanta ISD	✓	
Aubrey ISD	✓	✓
Austin ISD	✓	✓
Austwell-Tivoli ISD	✓	✓
Avalon ISD		✓
Avery ISD	✓	✓
Avinger ISD		✓
Axtell ISD	✓	✓
Azle ISD	✓	✓
Azleway Charter		✓
Baird ISD	✓	✓
Ballinger ISD	✓	✓
Balmorhea ISD		✓
Bandera ISD	✓	✓
Bangs ISD		✓
Banquete ISD	✓	✓
Barbers Hill ISD	✓	✓
Bay Area Charter		✓
Bay City ISD	✓	✓
Beaumont ISD	✓	✓
Beckville ISD		✓
Beeville ISD	✓	✓
Bellevue ISD	✓	✓
Bells ISD		✓
Bellville ISD	✓	
Belton ISD	✓	✓
Benavides ISD	✓	✓
Ben-Bolt ISD		✓
Big Sandy ISD		✓
Big Spring ISD		✓
Birdville ISD	✓	✓
Bishop CISD	✓	✓
Blackwell CISD	✓	✓
Blanco ISD	✓	✓
Blanket ISD		✓

DISTRICTS	Science	Math
Bloomburg Independent School District	✓	
Blooming Grove ISD	✓	✓
Bloomington ISD		✓
Blum ISD	✓	✓
Boerne ISD	✓	✓
Boles ISD		✓
Boling ISD		✓
Bonham ISD	✓	✓
Booker ISD		✓
Borger ISD	✓	✓
Bosqueville ISD	✓	✓
Bovina ISD	✓	✓
Bowie ISD	✓	✓
Boyd ISD		✓
Boys Ranch ISD		✓
Brackett ISD	✓	✓
Brady ISD	✓	✓
Brazos County Juvenile Justice Alternative Education Program	✓	
Brazos ISD	✓	✓
Brazosport ISD	✓	
Breckenridge ISD	✓	✓
Bremond ISD	✓	
Brenham ISD		✓
Bridge City ISD		✓
Bridgeport ISD		✓
Broaddus ISD		✓
Brock ISD		✓
Bronte ISD		✓
Brookeland ISD		✓
Brookesmith ISD		✓
Brooks Academy of Science & Engineering		✓
Brooks County ISD	✓	✓
Brownfield ISD	✓	✓
Brownsboro ISD		✓
Brownsville ISD	✓	✓
Brownwood ISD		✓
Bruceville-Eddy		✓
Bryan ISD	✓	
Bryson ISD		✓
Buena Vista ISD		✓
Bullard ISD	✓	✓

DISTRICTS	Science	Math
Buna ISD	✓	✓
Burkburnett ISD	✓	✓
Burkeville ISD		✓
Burleson ISD		✓
Burnham Wood Charter School	✓	✓
Bushland ISD		✓
Byers ISD	✓	✓
Caddo Mills ISD	✓	✓
Calallen ISD	✓	✓
Caldwell ISD		✓
Calhoun County ISD	✓	✓
Callisburg ISD	✓	✓
Canadian ISD		✓
Canton ISD		✓
Canutillo ISD	✓	✓
Canyon ISD		✓
Carlisle ISD		✓
Carrizo Springs CISD	✓	✓
Carrizo Springs CISD		
Carrollton-Farmers Branch ISD	✓	✓
Carthage ISD	✓	✓
Cayuga ISD	✓	✓
Cedar Hill ISD		✓
Cedars International Academy		✓
Celeste ISD		✓
Celina ISD		✓
Center ISD		✓
Center Point ISD	✓	✓
Centerville ISD	✓	
Central Heights ISD		✓
Central ISD		✓
Chapel Hill ISD	✓	✓
Charlotte ISD	✓	✓
Chester ISD		✓
Cheyenne ISD	✓	
Chico ISD	✓	✓
Childress ISD		✓
Chillicothe ISD		✓
Chilton ISD		✓
China Spring ISD	✓	
Chireno ISD		✓
Chisum ISD	✓	✓

DISTRICTS	Science	Math
Christian Academy of San Antonio		✓
Christoval ISD		✓
Cisco ISD	✓	✓
City View ISD	✓	✓
Clarendon ISD		✓
Clarksville ISD	✓	✓
Claude ISD		✓
Clear Creek ISD	✓	✓
Cleburne ISD	✓	✓
Cleveland ISD	✓	✓
Clifton ISD	✓	✓
Clint ISD		✓
Clyde CISD	✓	✓
Coahoma ISD	✓	✓
Coldspring-Oakhurst CISD	✓	
Coleman ISD	✓	✓
College Station ISD	✓	
Collinsville ISD	✓	✓
Colmesneil ISD		✓
Colorado City ISD	✓	✓
Colorado ISD		
Columbia-Brazoria ISD	✓	
Columbus ISD	✓	✓
Comal ISD	✓	✓
Comanche ISD	✓	✓
Comfort ISD	✓	
Commerce ISD		✓
Community ISD		✓
Como-Pickton CISD	✓	✓
Comstock ISD		✓
Connally ISD	✓	✓
Conroe ISD	✓	
Cooper ISD	✓	
Coppell ISD		✓
Copperas Cove ISD	✓	✓
Corpus Christi ISD	✓	✓
Corrigan-Camden ISD	✓	
Corsicana ISD	✓	✓
Cotton Center ISD		✓
Cotulla ISD		✓
Crandall ISD		✓

DISTRICTS	Science	Math
Crane ISD	✓	✓
Cranfills Gap ISD	✓	
Crawford ISD	✓	✓
Crockett County CCSD		✓
Crosby ISD	✓	
Crosbyton ISD	✓	✓
Cross Plains ISD	✓	✓
Cross Roads ISD		✓
Crowell ISD		✓
Crowley ISD	✓	✓
Crystal City ISD		✓
Cuero ISD	✓	✓
Culberson County-Allamoore ISD	✓	✓
Cumberland Academy	✓	
Cumby ISD	✓	
Cypress-Fairbanks ISD	✓	✓
Daingerfield-Lone Star ISD	✓	✓
Dalhart ISD	✓	✓
Dallas Can!		✓
Dallas Catholic Diocese	✓	✓
Dallas County Juvenile Justice Charter School		
Dallas ISD	✓	✓
Dawson ISD	✓	✓
Dayton ISD	✓	✓
De Leon ISD	✓	✓
Decatur ISD	✓	✓
Deer Park ISD	✓	✓
DeKalb ISD	✓	
Del Valle ISD	✓	✓
Dell City ISD		✓
Denison ISD		✓
Denton ISD	✓	✓
Denver City ISD	✓	✓
DeSoto ISD	✓	✓
Detroit ISD	✓	✓
Devine ISD	✓	✓
Dew ISD	✓	✓
Deweyville ISD	✓	✓
Diboll ISD	✓	✓
Dickinson ISD	✓	✓
Dilley ISD		✓

DISTRICTS	Science	Math
Dime Box ISD		✓
Dimmitt ISD		✓
Diocese of El Paso	✓	✓
Diocese of Amarillo		✓
Diocese of Austin		✓
Diocese of Beaumont		✓
Diocese of Brownsville		✓
Diocese of Corpus Christi	✓	
Diocese of Ft. Worth	✓	✓
Diocese Of Victoria	✓	✓
Dodd City ISD		✓
Donna ISD		✓
Dr. Garza Gonzalez Charter School	✓	✓
Dripping Springs ISD		✓
Driscoll ISD		✓
Dumas ISD		✓
Duncanville ISD		✓
Eagle Academies of Texas	✓	✓
Eagle Mountain-Saginaw ISD	✓	✓
Eanes ISD	✓	✓
Early ISD	✓	✓
East Central ISD		✓
East Fort Worth Montessori		✓
Eastland ISD	✓	✓
Ector County ISD	✓	✓
Edcouch-Elsa ISD	✓	✓
Eden CISD	✓	✓
Edgewood ISD	✓	✓
Edinburg CISD		✓
Edna ISD	✓	✓
Ehrhart School	✓	✓
El Campo ISD	✓	✓
El Paso Academy East/Reid Campus		✓
El Paso Academy West/Allen Campus		✓
El Paso ISD		✓
El Paso School of Excellence		✓
Electra ISD	✓	✓
Elgin ISD	✓	✓
Elkhart ISD		✓
Elysian Fields ISD		✓
Ennis ISD		✓

DISTRICTS	Science	Math
EOAC Waco		✓
Epiphany Episcopal School		✓
Era ISD	✓	
Erath Excels Academy		✓
Etoile ISD	✓	✓
Eula ISD	✓	✓
Eustace ISD	✓	✓
Evadale ISD	✓	✓
Evant ISD		✓
Evergreen Academy		✓
Everman ISD	✓	✓
Excelsior ISD		✓
Ezzell ISD	✓	✓
Fabens ISD		✓
Fairfield ISD	✓	✓
Faith Family Academy/OC		✓
Falls City	✓	
Fannindel ISD	✓	✓
Farmersville ISD		✓
Fayetteville ISD	✓	✓
Federal Bureau of Prisons		✓
Ferris ISD		✓
Flatonia ISD	✓	
Florence ISD		✓
Floresville ISD	✓	✓
Flour Bluff ISD	✓	✓
Floydada ISD	✓	✓
Focus Learning Academy		✓
Follett ISD		✓
Forestburg ISD		✓
Forney ISD		✓
Forsan ISD	✓	✓
Fort Bend ISD	✓	✓
Fort Davis ISD		✓
Fort Elliott CISD		✓
Fort Stockton ISD	✓	✓
Fort Worth Academy of Fine Arts		✓
Fort Worth Christian Schools		✓
Fort Worth ISD	✓	✓
Frankston ISD		✓
Fredericksburg ISD	✓	
Freer ISD	✓	✓

DISTRICTS	Science	Math
Frenship ISD	✓	✓
Friendswood ISD	✓	✓
Friona ISD		✓
Frisco ISD	✓	✓
Frost ISD		✓
Fruitvale ISD	✓	✓
Ft Sam Houston ISD		✓
Ft. Hancock ISD		✓
Gainesville ISD	✓	✓
Galena Park ISD		✓
Galveston ISD	✓	✓
Ganado ISD	✓	✓
Garland ISD	✓	✓
Garner ISD		✓
Garrison ISD		✓
Gatesville ISD		✓
Gateway Charter Academy		✓
George West ISD	✓	✓
Georgetown ISD		✓
Gholson ISD	✓	✓
Gilmer ISD		✓
Girls and Boys Prep Acadamey		✓
Gladewater ISD		✓
Glasscock County ISD		✓
Godley ISD		✓
Gold Burg ISD	✓	✓
Golden Rule Charter School	✓	
Goldthwaite ISD	✓	✓
Goliad ISD	✓	✓
Gonzales ISD	✓	✓
Goodrich ISD	✓	
Goose Creek CISD	✓	✓
Gorman ISD	✓	✓
Graham ISD	✓	✓
Granbury ISD		✓
Grand Prairie ISD	✓	✓
Grand Saline ISD	✓	✓
Grandfalls-Royalty ISD	✓	✓
Grandview ISD		✓
Grandview-Hopkins ISD		✓
Grape Creek ISD	✓	✓
Grapevine-Colleyville ISD	✓	✓

DISTRICTS	Science	Math
Greenville ISD		✓
Greenwood ISD	✓	✓
Gregory-Portland ISD	✓	✓
Groesbeck ISD	✓	✓
Groom ISD	✓	
Gruver ISD		✓
Gunter ISD	✓	✓
Gustine ISD	✓	
Hale Center ISD	✓	✓
Hallettsville ISD	✓	✓
Hallsville ISD		✓
Hamlin ISD	✓	✓
Hamshire-Fannett ISD		✓
Happy Hill Farm Academy		✓
Happy ISD		✓
Hardin ISD	✓	✓
Hardin-Jefferson ISD		✓
Harlandale ISD	✓	✓
Harleton ISD	✓	✓
Harlingen CISD		✓
Harmony ISD	✓	✓
Harmony Science Academy		✓
Harris County Juvenile Justice Alternative Education Program		✓
Harrold ISD		✓
Hart ISD	✓	✓
Hartley ISD		✓
Harts Bluff ISD	✓	✓
Haskell CISD	✓	✓
Hawkins ISD	✓	✓
Hawley ISD	✓	✓
Hays CISD	✓	✓
Hemphill ISD	✓	✓
Henderson ISD		✓
Henrietta ISD	✓	✓
Hereford ISD	✓	✓
Hermleigh ISD	✓	✓
Hico ISD	✓	✓
Hidalgo ISD	✓	
Higgins ISD		✓
Higgs, Carter, King Charter School		✓
High Island ISD	✓	✓
Highland ISD	✓	✓

DISTRICTS	Science	Math
Highland Park ISD	✓	✓
Hillsboro ISD	✓	✓
Hitchcock ISD	✓	
Holland ISD		✓
Holliday ISD	✓	✓
Hondo ISD		✓
Hooks ISD	✓	✓
Hosanna Christian Academy		✓
Houston Can Academy Charter School		✓
Houston ISD	✓	✓
Howe ISD		✓
Hubbard ISD		✓
Hudson ISD	✓	✓
Huffman ISD	✓	
Hughes Springs ISD	✓	✓
Hull-Daisetta ISD		✓
Humble ISD	✓	✓
Huntington ISD		✓
Huntsville ISD	✓	
Hurst-Euless-Bedford ISD	✓	✓
Hutto ISD	✓	✓
Idalou ISD	✓	✓
IDEA Academy	✓	
Industrial ISD	✓	✓
Ingleside ISD	✓	✓
Ingram ISD		✓
Iowa Park CISD		✓
Ira ISD	✓	✓
Iraan Sheffield ISD		✓
Iredell ISD	✓	
Irion County ISD	✓	✓
IRRA		✓
Irving ISD	✓	✓
Italy ISD		✓
Jacksboro ISD	✓	✓
Jacksonville ISD	✓	✓
Jarrell ISD		✓
Jasper ISD		✓
Jayton ISD		✓
Jefferson ISD	✓	✓
Jim Ned CISD	✓	✓
Joaquin ISD		✓

DISTRICTS	Science	Math
John H. Wood Charter School		✓
Johnson City ISD		✓
Joshua ISD		✓
Jourdanton ISD		✓
Judson ISD	✓	✓
Junction ISD		✓
Juvenile Justice Center	✓	
Karnack ISD		✓
Karnes City ISD		✓
Kathy ISD	✓	
Katy ISD	✓	✓
Kaufman ISD		✓
Keene ISD	✓	✓
Keller ISD	✓	✓
Kelton ISD		✓
Kemp ISD		✓
Kenedy County Wide CSD		✓
Kenedy ISD	✓	✓
Kenley School	✓	
Kennedale ISD	✓	✓
Kerens		✓
Kermit ISD	✓	✓
Kerrville ISD		✓
Kilgore ISD	✓	✓
Killeen ISD	✓	✓
Kingsville ISD	✓	✓
Kirbyville CISD		✓
Klein ISD	✓	✓
Klondike ISD		✓
Knox City-O'Brien CISD		✓
Kopperl ISD	✓	✓
Kountze ISD		✓
Kress ISD		✓
Krum ISD	✓	✓
La Grange ISD		✓
La Joya ISD	✓	✓
La Marque ISD	✓	
La Porte ISD	✓	✓
La Vega ISD	✓	✓
La Vernia ISD	✓	✓
La Villa ISD		✓
Lackland ISD		✓

DISTRICTS	Science	Math
LaFeria ISD		✓
Lago Vista ISD		✓
Lake Dallas ISD		✓
Lake Travis ISD	✓	✓
Lake Worth ISD	✓	✓
Lamar CISD	✓	✓
Lamar State College Orange		✓
LaMarque ISD	✓	✓
Lamesa ISD	✓	✓
Lampasas		✓
Lancaster ISD	✓	✓
LaPoynor ISD		✓
Laredo ISD	✓	
Lazbuddie ISD		✓
Leakey ISD	✓	
Leander ISD	✓	✓
Leary ISD	✓	
Lefors ISD		✓
Leon ISD	✓	
Leonard ISD		✓
Levelland ISD	✓	✓
Lewisville ISD	✓	✓
Lexington ISD	✓	
Liberty Hill ISD	✓	
Liberty ISD	✓	✓
Liberty-Eylau ISD	✓	✓
Life School (Oak Cliff)		✓
Lindale ISD		✓
Linden-Kildare CISD	✓	✓
Lindsay ISD	✓	
Lingleville ISD		✓
Little Cypress-Mauriceville CISD	✓	✓
Little Elm ISD	✓	✓
Littlefield ISD	✓	✓
Livingston ISD		✓
Llano ISD	✓	✓
Lockhart ISD	✓	
Lockney ISD	✓	✓
Lohn ISD	✓	
London ISD		✓
Longview ISD	✓	✓
Loop ISD	✓	

DISTRICTS	Science	Math
Loraine ISD	✓	✓
Lorena ISD		✓
Lorenzo ISD	✓	✓
Los Fresnos CISD	✓	✓
Louise ISD	✓	✓
Lovejoy ISD	✓	✓
Lubbock Christian Schools	✓	✓
Lubbock ISD	✓	
Lubbock-Cooper ISD	✓	✓
Lueders-Avoca ISD		✓
Lufkin ISD		✓
Luling ISD	✓	✓
Lumberton ISD		✓
Lyford CISD		✓
Lytle ISD	✓	✓
Mabank ISD	✓	
Madisonville ISD	✓	
Magnolia ISD	✓	✓
Mainland Preparatory	✓	
Malta ISD	✓	✓
Manor ISD	✓	✓
Mansfield ISD	✓	✓
Marble Falls ISD	✓	✓
Marfa ISD		✓
Marietta ISD	✓	
Marion ISD	✓	
Marlin ISD		✓
Marshall ISD	✓	✓
Mart ISD	✓	✓
Mason ISD	✓	✓
Mathis ISD	✓	✓
Maud ISD	✓	✓
May ISD	✓	✓
Maypearl ISD	✓	✓
McAllen ISD	✓	✓
McCamey ISD		✓
McDade ISD	✓	✓
McGregor ISD	✓	✓
McKinney ISD	✓	✓
McLeod ISD	✓	✓
McMullen County ISD		✓
Meadow ISD		✓

DISTRICTS	Science	Math
Meadowbrook Christian		✓
Medina ISD		✓
Medina Valley ISD	✓	✓
Melissa ISD	✓	
Menard ISD	✓	✓
Mercedes ISD		✓
Meridian ISD		✓
Merkel ISD	✓	✓
Mesquite ISD	✓	✓
Mexia ISD	✓	✓
Meyersville ISD	✓	
Miami ISD	✓	
Midland Academy Charter School	✓	✓
Midland Christian School	✓	
Midland ISD	✓	✓
Midlothian ISD		✓
Midway ISD	✓	✓
Mildred ISD		✓
Miles ISD		✓
Milford ISD	✓	✓
Miller Grove ISD	✓	✓
Millsap ISD		✓
Mineola ISD		✓
Mineral Wells ISD		✓
Mission CISD	✓	✓
Monahans Wickett Pyote ISD	✓	✓
Montague ISD		✓
Monte Alto ISD		✓
Montgomery ISD	✓	✓
Moody ISD	✓	✓
Moran ISD	✓	✓
Morton ISD		✓
Mount Calm ISD		✓
Mt. Enterprise ISD		✓
Mt. Pleasant ISD	✓	✓
Mt. Vernon ISD	✓	✓
Muenster ISD		✓
Muleshoe ISD	✓	✓
Mullin ISD		✓
Munday ISD	✓	
Murchison ISD		✓
Nacogdoches ISD	✓	✓

DISTRICTS	Science	Math
Natalia ISD	✓	✓
Navarro ISD	✓	
Navasota ISD	✓	
Nazareth ISD		✓
Neches ISD		✓
Nederland ISD		✓
New Boston ISD	✓	✓
New Braunfels ISD		✓
New Caney ISD	✓	
New Deal ISD	✓	✓
New Diana ISD		✓
New Summerfield ISD		✓
Newcastle ISD	✓	✓
Newton ISD	✓	✓
Nixon Smiley ISD		✓
Nocona ISD	✓	✓
Nordheim ISD	✓	✓
North East ISD	✓	✓
North Forest ISD	✓	✓
North Hopkins ISD	✓	✓
North Lamar ISD	✓	✓
North Zulch ISD	✓	
Northeast Christian Academy	✓	
Northeast ISD	✓	
Northside ISD	✓	✓
Northwest ISD	✓	✓
Novice ISD		✓
Nueces Canyon CISD	✓	✓
Nursery ISD		✓
NYOS Charter School		✓
Odem Edroy ISD	✓	✓
O'Donnell ISD	✓	
Oglesby ISD		✓
Olfen ISD	✓	✓
Olney ISD	✓	✓
Onalaska ISD	✓	
One Stop Multiservice Charter School	✓	
Orange Grove ISD	✓	✓
Orangefield ISD		✓
Ore City ISD		✓
Overton ISD		✓
Paint Creek ISD	✓	✓

DISTRICTS	Science	Math
Paint Rock ISD	✓	✓
Palacios ISD	✓	✓
Palestine ISD	✓	
Palmer ISD		✓
Pampa ISD	✓	✓
Panhandle ISD	✓	✓
Panther Creek ISD		✓
Paradigm Accelerated School		✓
Paradise ISD	✓	✓
Paris ISD	✓	✓
Pasadena ISD	✓	
Patton Springs ISD		✓
Pawnee ISD		✓
Pearland ISD	✓	✓
Pearsall ISD	✓	✓
Peaster ISD		✓
Pecos Barstow Toyah ISD	✓	✓
Pegasus Charter School	✓	✓
Penelope ISD	✓	
Perrin-Whitt CISD	✓	✓
Perryton ISD		✓
Petersburg ISD	✓	
Petrolia ISD	✓	✓
Pettus ISD	✓	✓
Pewitt CISD	✓	✓
Pflugerville ISD	✓	
Pharr-San Juan-Alamo ISD	✓	✓
Phoenix Charter School	✓	
Pilot Point ISD		✓
Pine Tree ISD		✓
Pittsburg ISD	✓	✓
Plains ISD	✓	✓
Plainview ISD	✓	✓
Plano ISD	✓	✓
Pleasant Grove ISD	✓	✓
Pleasanton ISD		✓
Plemons-Stinnett-Phillips CISD		✓
Port Aransas ISD		✓
Port Arthur ISD	✓	✓
Port Neches/Arthur	✓	✓
Port Neches-Groves ISD	✓	✓
Post ISD	✓	

DISTRICTS	Science	Math
Poteet ISD	✓	✓
Pottsboro ISD		✓
Prairie Lea ISD		✓
Prairie Valley ISD	✓	✓
Prairiland ISD	✓	✓
Premont ISD	✓	✓
Presidio ISD	✓	
Prestonwood Christian Academy		✓
Princeton ISD		✓
Pringle-Morse CISD		✓
Progreso ISD	✓	
Prosper ISD		✓
Quanah ISD	✓	✓
Queen City ISD	✓	✓
Quinlan ISD		✓
Quitman ISD		✓
Radford Private School	✓	
Radiance Academy		✓
Rains ISD		✓
Ralls ISD	✓	✓
Ranch Academy		✓
Randolph Field ISD	✓	✓
Ranger ISD	✓	✓
Rankin ISD	✓	✓
Rapoport Academy ISD	✓	
Raul Yzaguirre School for Success		✓
Raymondville ISD	✓	✓
Reagan County ISD		✓
Red Lick ISD	✓	
Red Oak ISD		✓
Redwater ISD	✓	✓
Refugio ISD	✓	✓
Ricardo ISD	✓	✓
Rice CISD	✓	✓
Rice ISD	✓	
Richard Milburn Academy		✓
Richardson ISD		✓
Riesel ISD	✓	
Rio Grande City CISD		✓
Rio Hondo ISD	✓	✓
Rio Vista ISD		✓
Rising Star ISD		✓

DISTRICTS	Science	Math
River Road ISD		✓
Rivercrest ISD	✓	✓
Riviera ISD		✓
Robert Lee ISD	✓	✓
Robinson ISD	✓	✓
Robstown ISD		✓
Roby CISD	✓	✓
Rochelle ISD		✓
Rockdale ISD		✓
Rocksprings ISD		✓
Rockwall ISD		✓
Rogers ISD	✓	
Roma ISD		✓
Roosevelt ISD	✓	✓
Ropes ISD		✓
Roscoe ISD	✓	✓
Rosebud-Lott ISD		✓
Rotan ISD	✓	✓
Round Rock ISD	✓	✓
Round Top-Carmine ISD		✓
Roxton ISD		✓
Royse City ISD	✓	✓
Rule ISD	✓	✓
Runge ISD	✓	✓
Rusk ISD		✓
Sabinal ISD	✓	
Sabine ISD		✓
Sabine Pass ISD	✓	
Saint Jo ISD	✓	✓
Salado ISD		✓
Sam Rayburn ISD		✓
Samnorwood ISD		✓
San Angelo ISD	✓	✓
San Antonio ISD	✓	✓
San Augustine ISD		✓
San Benito CISD		✓
San Diego ISD		✓
San Elizario ISD	✓	✓
San Felipe-Del Rio CISD	✓	✓
San Marcos CISD	✓	✓
San Saba ISD	✓	✓
San Vicente ISD		✓

DISTRICTS	Science	Math
Sands CISD	✓	✓
Sanford-Fritch ISD		✓
Sanger ISD	✓	✓
Santa Anna ISD		✓
Santa Fe ISD	✓	✓
Santa Gertrudis ISD	✓	
Santa Maria ISD		✓
Santa Rosa ISD		✓
Santo ISD		✓
Schertz-Cibolo-Universal City ISD	✓	✓
Schleicher County ISD	✓	✓
School of Excellence San Antonio	✓	✓
Scurry-Rosser ISD		✓
Seagraves ISD		✓
Sealy ISD	✓	
Seashore Learning Center	✓	✓
Seguin ISD	✓	✓
Seminole ISD		✓
Seymour ISD		✓
Shallowater ISD	✓	✓
Shamrock ISD		✓
Sharyland ISD		✓
Shekinah ISD		✓
Shelbyville ISD		✓
Sheldon ISD	✓	✓
Sherman ISD	✓	✓
Shiner ISD	✓	✓
Sidney ISD		✓
Silsbee ISD	✓	✓
Silverton ISD		✓
Simms ISD	✓	✓
Sinton ISD	✓	✓
Skidmore-Tynan ISD	✓	✓
Slidell ISD		✓
Slocum ISD		✓
Smithville ISD		✓
Smyer ISD		✓
Snook ISD	✓	
Snyder ISD	✓	✓
Socorro ISD	✓	✓
Somerset ISD	✓	✓

DISTRICTS	Science	Math
Sonora ISD	✓	✓
South San Antonio ISD	✓	✓
South Texas Educational Technologies, Inc.		✓
Southside ISD	✓	✓
Southwest ISD	✓	✓
Southwest Preparatory		✓
Spearman ISD	✓	✓
Splendora ISD	✓	
Spring Branch ISD	✓	✓
Spring Hill ISD	✓	✓
Spring ISD	✓	✓
Springlake-Earth ISD	✓	✓
Springtown ISD		✓
Spur ISD	✓	✓
Spurger ISD		✓
St. Mary's Academy Charter School	✓	
Stamford ISD	✓	✓
Stanton ISD		✓
Stephenville ISD	✓	✓
Sterling City ISD		✓
Stockdale ISD	✓	✓
Stratford ISD		✓
Sulphur Bluff ISD	✓	✓
Sulphur Springs ISD	✓	✓
Sundown ISD	✓	
Sunnyvale ISD	✓	✓
Sunray ISD	✓	✓
Sweet Home ISD	✓	
Sweetwater ISD	✓	✓
Taft ISD		✓
Tahoka ISD	✓	✓
Tarkington ISD		✓
Tatum ISD	✓	✓
Taylor ISD	✓	✓
Teague ISD		✓
Temple ISD	✓	✓
Tenaha ISD	✓	
Terlingua CSD		✓
Terrell ISD	✓	✓
Texans Can! Academy		✓
Texarkana ISD	✓	✓

DISTRICTS	Science	Math
Texas City ISD	✓	✓
Texas School for the Deaf	✓	
Texas Youth Commission		✓
Texline ISD		✓
Thorndale ISD	✓	✓
Thrall ISD		✓
Three Rivers ISD		✓
Throckmorton ISD		✓
Tidehaven ISD	✓	✓
Tom Bean ISD		✓
Tomball ISD		✓
Tornillo ISD		✓
Trent ISD	✓	
Trenton ISD		✓
Trinidad ISD		✓
Trinity Charter		✓
Troup ISD	✓	✓
Troy ISD		✓
Tulia ISD		✓
Tuloso Midway ISD	✓	✓
Two Dimensions Preparatory Charter School		✓
Tyler ISD	✓	✓
Union Grove ISD		✓
Union Hill ISD	✓	✓
United ISD	✓	✓
Universal Academy		✓
University of Texas - Brownsville		✓
UT Charter Schools	✓	✓
Uvalde ISD	✓	
Valley Mills ISD		✓
Valley View ISD	✓	✓
Van Alstyne ISD	✓	✓
Van ISD	✓	✓
Van Vleck ISD	✓	✓
Venus ISD	✓	✓
Veribest ISD		✓
Vernon ISD		✓
Victoria ISD	✓	✓
Vidor ISD	✓	✓
Vysehrad ISD		✓
Waco ISD	✓	✓

DISTRICTS	Science	Math
Wall ISD	✓	✓
Waller ISD	✓	✓
Walnut Bend ISD	✓	
Warren ISD		✓
Waskom ISD		✓
Water Valley ISD		✓
Waxahachie ISD		✓
Weatherford ISD	✓	✓
Weimar ISD		✓
Wells ISD		✓
Weslaco ISD	✓	
West ISD		✓
West Hardin County CISD	✓	✓
West Orange Cove CISD	✓	✓
West Orange-Stark ISD	✓	
West Oso ISD	✓	✓
West Rusk ISD		✓
West Texas State School		✓
Westbrook ISD	✓	✓
Westhoff ISD	✓	✓
Westlake Academy		✓
Westphalia ISD		✓
Westwood ISD	✓	✓
Wharton ISD	✓	✓
Wheeler ISD		✓
White Deer ISD		✓
White Oak ISD		✓
White Settlement ISD		✓
Whiteface CISD	✓	✓
Whitehouse ISD		✓
Whitesboro ISD		✓
Whitewright ISD		✓
Whitharral ISD		✓
Whitney ISD	✓	✓
Wichita Falls ISD	✓	✓
Wildorado ISD		✓
Willis ISD		✓
Wills Point ISD		✓
Wimberley ISD	✓	✓
Windthorst ISD	✓	✓
Winfield ISD	✓	✓
Winfree Academy		✓

DISTRICTS	Science	Math
Wink Loving ISD	✓	✓
Winnsboro ISD	✓	✓
Winona ISD		✓
Winters ISD	✓	✓
Woden ISD	✓	✓
Wolfe City ISD		✓
Woodsboro ISD	✓	✓
Woodson ISD		✓
Woodville ISD	✓	✓
Wortham ISD		✓
Wylie ISD	✓	✓
Yantis ISD	✓	✓
Yoakum ISD	✓	✓
Yorktown ISD		✓
Ysleta ISD	✓	✓
Zapata ISD	✓	✓
Zavalla ISD	✓	✓

2006-2007
TRC Participant Data Form

Texas Regional Collaboratives for Excellence in Science Teaching

The University of Texas at Austin

2006 - 2007 Participant Data Form

Today's Date _____ Collaborative _____ Project Director _____

Last Name _____ First Name _____

Home Address _____ E-mail Address _____

City _____ State ____ Zip _____ **Home Phone** Area Code ____ _____

Education Level ☐ High School ☐ Bachelor ☐ Master ☐ Doctorate **Gender** ☐ F ☐ M

Ethnicity (check one) ☐ African-American ☐ Asian-American ☐ Caucasian ☐ Hispanic ☐ Native American ☐ Other

Teaching Level (check only the **one** that most closely applies)

☐ Elementary ☐ Middle School ☐ High School ☐ University/College ☐ Administrator

(Select one of the above ONLY if you are currently teaching in the classroom.)

☐ ESC ☐ Specialist/Facilitator ☐ Informal Education ☐ Education Student ☐ Consultant ☐ Other:

2006-2007 is my ___ Year of Classroom Teaching Experience

2006-2007 is my ___ Year as a Regional Collaborative Member

Section I: *If you are involved in a K-12 public or private institution for the academic year 2006-2007, please complete the following.*

School District _____ ☐ Dr. ☐ Mr. ☐ Ms. Superintendent's Title _____ Superintendent's Name (First and Last) _____

District Address _____ City _____ Zip _____

Campus Name (Do not abbreviate) _____ ☐ Dr. ☐ Mr. ☐ Ms Principal's Title _____ Principal's Name (First and Last) _____

Campus Address _____ City _____ Zip _____

Campus Phone:

County _____ Area Code ____ Phone Number _____

The campus where I teach qualifies as a Title I (check one) ☐ Yes ☐ No

Campus Poverty Level (check one) % Free/Reduced Lunch ☐ Low (<35%) ☐ Medium (35-50%) ☐ High (51-75%) ☐ Very High (>75%)

The campus where I teach is a _____ school (check one) ☐ Private ☐ Charter ☐ Public ☐ Alternative

Your 2006-2007 Classroom Demographics Please complete **only** if you are a K-12 classroom teacher.

Please give actual numbers. Do not use percentages. (list only students that are on your classroom roll this year)

Number of African-American Students _____

Number of Asian American Students _____

Number of Caucasian Students _____

Number of Hispanic Students _____

Number of Native American Students _____

Number of Other Students _____

_____ **Total Number of Students**

Grade(s) Teaching 06-07 School Year (check all that apply)		**Subject(s) Teaching 2006-2007 School Year** (check all that apply)		**State of Texas Certification Status** (check all that apply)
☐ PreK	☐ 6th	☐ Elementary Science (PreK-5)	☐ GMO	☐ Certified for all subjects or grades I currently teach
☐ K	☐ 7th	☐ Middle School Science (6-8)	☐ AP Science	☐ Certified, but not for all subjects or grades I currently teach
☐ 1st	☐ 8th	☐ Health	☐ Other Science	
☐ 2nd	☐ 9th	☐ IPC	☐ Mathematics	☐ Currently pursuing certification
☐ 3rd	☐ 10th	☐ Biology	☐ Other _____	
☐ 4th	☐ 11th	☐ Chemistry		☐ Currently under emergency, provisional, or temporary certificate
☐ 5th	☐ 12th	☐ Physics		

Do you meet the No Child Left Behind criteria for **"highly qualified"** status? ☐ Yes ☐ No ☐ Not Sure

Estimated total hours of college coursework completed in science or science methods ☐

Estimated total Continuing Professional Education (CPE) credits in science or science methods ☐

I certify that the above information is correct to the best of my knowledge. The information supplied above is confidential and will not be shared by the Texas Regional Collaboratives with entities outside the TRC.

Signature: _____