THE TEXAS RURAL TECHNOLOGY (R-TECH) PILOT PROGRAM

INTERIM EVALUATION REPORT

DECEMBER 2008

TCER
Texas Center for Educational Research

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Executive Summary

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Acknowledgments

EXECUTIVE SUMMARY

Texas enrolls more students in rural public schools than any other state (Johnson & Strange, 2007). Eighteen percent of Texas' more than 4.5 million public school students attend a rural public school, and more than half of the state's public school districts and 27% of its public schools are located in rural areas (authors' calculations using National Center for Education Statistics [NCES] and Texas Education Agency [TEA] data, 2007). Recognizing the challenges rural districts face in providing broad curricular offerings and supplemental educational services to students, in 2007, the 80th Texas Legislature authorized the creation of a pilot program designed to provide technology-based supplemental educational services to rural school districts that show an overall academic need as demonstrated by their 2007 state accountability ratings. The Rural Technology (R-Tech) Pilot Program provides nearly $8 million in funding for technology-based supplemental education programs, including online courses, to students in Grades 6 through 12 in high-need, rural districts.

In establishing R-Tech, Legislators called for the pilot program to be evaluated to assess its effectiveness, requiring an interim report in December 2008 and a final evaluation report in December 2010. The following results are drawn from the evaluation's first interim report (Texas Center for Educational Research [TCER], December 2008). The interim report describes the characteristics of R-Tech districts and campuses, the students they enroll, and the teachers they employ. It presents baseline data on students' academic outcomes and describes how districts plan to implement the R-Tech program in their schools. Report sections provide baseline information and are descriptive in nature. They provide important information about the context for and implementation of the R-Tech pilot program, but they do not comprise an assessment of the pilot's effectiveness. A comprehensive evaluation report, due in December 2010, will evaluate the pilot program's effectiveness, including its effect on students' academic achievement and college readiness outcomes, as well as its cost effectiveness.

Throughout the report, state averages calculated at the district level omit R-Tech districts, and averages calculated at the campus level omit R-Tech campuses and campuses characterized as elementary programs in the Academic Excellence Indicator System (AEIS) data files.

INTERIM EVALUATION FINDINGS

Characteristics of R-Tech Districts and Campuses

- In spring of 2008, 64 rural Texas districts were awarded Cycle 1 grants to implement the R-Tech Pilot Program. Across R-Tech districts, 115 schools are participating in the R-Tech program, including 63 high schools, 48 middle schools, 3 K-12 campuses, and 1 elementary school that includes sixth grade students.

- All R-Tech districts enrolled fewer than 5,000 students in 2006-07 (the year used to determine grant eligibility), but there was considerable range in district size. The smallest R-Tech district enrolled 183 students, and the largest enrolled 4,954 students. On average, R-Tech districts enrolled 1,643 students in 2006-07.

- R-Tech districts are widely distributed across the state. The largest percentage of R-Tech districts (14%) are located within the area served by the Education Service Center (ESC) Region 10 (Richardson), only two ESC regions (ESC Region 9, Wichita Falls, and ESC Region 19, El Paso) have no R-Tech districts.

- R-Tech districts lag state averages in terms of the proportion of districts receiving accountability of ratings of Exemplary or Recognized, but exceed the state average in the proportion of districts rated Academically Acceptable.

- R-Tech campuses also lag the state in terms of Exemplary or Recognized accountability ratings and exceed state averages in terms of Academically Acceptable and Academically Unacceptable accountability ratings.

Students and Teachers in R-Tech Districts and Campuses

- In 2006-07, R-Tech campuses enrolled a substantially larger proportion of White students and smaller proportions of minority and economically disadvantaged students than did schools statewide.

- Similarly, R-Tech campuses employed larger proportions of White teachers and smaller proportions of minority teachers than did other Texas schools in 2006-07.

The Implementation Plans of R-Tech Districts

Evaluators analyzed the application materials for each of the 64 districts that were awarded R-Tech funding. The following findings are drawn from that analysis.

- A majority of districts plan to implement R-Tech at both the high school and middle school levels (78%). About 17% of districts plan to implement R-Tech in high schools only and about 5% plan to implement the program in middle schools only.

- Aggregated across all R-Tech districts, the pilot program will serve approximately 46% of grantee districts' middle school students and about 50% of their high school students.

- Nearly all districts plan to implement the R-Tech program during the 2008-09 and 2009-10 school years (98%), and somewhat fewer districts also plan to include R-Tech as part of summer school programs in 2008 (86%) and 2009 (88%).

- Nearly all districts are focusing R-Tech services on math instruction (98%). Fewer districts plan to implement R-Tech in English/language arts (ELA) (91%), science (89%), and social studies (86%). Less than half of districts (48%), plan to use R-Tech funds to provide instruction in languages other than English.

- Most districts plan to use R-Tech funding to provide remediation and tutoring to students (94%). Notably smaller percentages are planning for distance learning (66%), dual credit coursework (55%), and credit recovery programs (50%).

- In most districts, students will be able to access R-Tech services after school (72%), and before school (57%). Some districts will allow students to access services from home using Internet-based programs or through a school laptop checkout program (44%).

- Students will be able to access R-Tech services in school computer labs (59% of districts), at home (44%), in the school library (32%), or learning centers (17%). Only 15% of districts indicated that students may access R-Tech from classroom computers, and 9% had arranged for R-Tech support to be available on public library computers.

R-Tech Baseline Characteristics

Because 2007-08 student level data were not available, AEIS data from one (2006-07) and two (2005-06) years prior to program implementation (2007-08) were used as baseline measures. These data were at the campus level. Thus, small campuses were disproportionately weighted in the analyses in terms of the number of students served. Comparisons were made among R-Tech campuses, other public school campuses (excluding R-Tech campuses and campuses characterized as elementary programs in AEIS data files) and TEA constructed peer campuses. Peer campuses, by design, are the most relevant comparison

group for R-Tech campuses because peer campuses serve similar student populations in terms of ethnic, economic, language, and mobility characteristics. Results of these comparisons are summarized below.

- In 2006-07, TAKS passing rates at R-Tech campuses were above state averages in mathematics, science, all tests taken, and reading/ ELA, equal to the state average in social studies, and slightly below in writing. Compared to peer campuses, R-Tech passing rates were slightly lower in all tested areas (two to three percentage points lower).

- In comparison with TAKS state grade-level averages, R-Tech high school grades ($9^{th} – 12^{th}$ grade) performed from two to six percentage points higher. However, Grades 7 and 8 performed from one percentage point lower to two percentage points higher than state averages, and Grade 6 performed from one percentage point higher to four percentage points lower.

- In comparison with TAKS peer campus grade-level averages, R-Tech campuses performed below their peers in each tested area. The largest deficits were in mathematics and all tests taken and at Grades 6 through 8.

- The 2005-06 attendance rate at R-Tech campuses was slightly above the state average and slightly below the peer campus average.

- The 2005-06 R-Tech campus dropout rate at Grades 7 and 8 was lower than the state average but higher than the peer campus average. The R-Tech dropout rate at Grades 9 through 12 was also lower than the state average but higher than the peer campus average.

- From 2003 through 2006, the mobility rates at R-Tech campuses were about 13 to 15 percentage points lower than state averages, and about 3 to 4 percentage points higher than peer campus averages.

- Compared to peer campuses, R-Tech campuses had a slightly lower percentage of 2005-06 advanced course completions. However, compared to the state average, R-Tech campuses had a slightly higher percentage of advanced course completions.

- The 2005-06 R-Tech high school graduation rate was higher than the state graduation rate, but slightly lower than the peer campus rate. The 2005-06 R-Tech Recommended High School Program (RHSP) rate was slightly higher than the state rate, but lower than the peer campus rate.

- In 2005-06, the percentage of R-Tech seniors taking college entrance examinations was higher than the state average but lower than the peer campus average. SAT average scores in 2005-06 were highest for R-Tech campuses and lowest for the state average. ACT average scores were highest for peer campuses, followed by R-Tech campuses and the state average.

- The percentages of 2005-06 R-Tech graduates who were college-ready were slightly higher than state averages but lower than peer campus averages. This was true in mathematics, reading, and for both subjects combined.

In sum, R-Tech campuses lag the peer campuses in almost all performance comparisons. The R-Tech campuses have lower TAKS passing rates, attendance rates, advanced course completion rates, graduation rates, RHSP completion rates, and college readiness rates. In addition, R-Tech campuses have higher dropout rates and higher student mobility rates.

THE CONTINUING EVALUATION

The evaluation of the R-Tech pilot program will extend through the 2008-09 and 2009-2010 school years. Future evaluation activities of the R-Tech pilot program will include surveys with administrators, teachers, and students; interviews with program staff; focus groups with teachers and students; site visits

to a sample of R-Tech campuses; observations of R-Tech service delivery; and investigations of the impact of R-Tech services on student academic outcomes, the program's cost effectiveness, and the sustainability of R-Tech services. The findings from these evaluations activities will be presented in the December 2010 evaluation report.

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