

# High Schools That Work

## A Summary of:

**“HSTW Assessment Scores for African American and White Students”** (2001) Southern Regional Education Board (Internal Documents). By Gene Bottoms.

**“Academic and Vocational Teachers Can Improve the Reading Achievement of Male Career-Bound Students”** (1999) Southern Regional Education Board. By Mark Forge and Gene Bottoms.

**“A High Schools that Work Case Study: Los Fresnos High School”** (2000) Southern Regional Education Board. By Gene Bottoms.

### Focus

- Early Childhood
- Primary School
- Middle School
- ✓ Secondary School
- Postsecondary
- Extended Learning

## Overview

High Schools That Work (HSTW) began in 1987 and is designed to help states raise the academic achievement levels of career-bound students. HSTW, a project of the Southern Regional Education Board (SREB), was first replicated among mostly southern states, but by 2001 more than 1,000 schools in 26 states were using the program. The main goal of the program is to help participating schools replace their general and vocational tracks with an academic core of high-level math, science and English courses, integrated with quality vocational studies, thus helping to raise achievement and broaden students’ educational and career opportunities. Schools choosing HSTW, implement systemic reform by changing their curricula, scheduling and resource allocations. To assess results, schools use an HSTW Assessment based on a battery of tests drawn from the National Assessment of Educational Progress (NAEP). (Findings below refer to these tests.) This summary includes a case study of Los Fresnos High School, just north of the Mexican border in Texas. In the early to mid 1990s, Los Fresnos High

## POPULATION

Nearly 55,000 seniors from HSTW schools across the country took the HSTW Assessment in 2000. That year, 66% of the students assessed were white, 25% African American, 4% Latino and 5% other. Of the students assessed in urban HSTW sites, 72% were African American, 22.5% white, 2.5% Latino and 3% other. In the “Academic and Vocational Teachers” research brief, scores of 444 students who participated in HSTW between 1996 and 1998 are analyzed according to gender and ethnicity. The HSTW case study focused on the Los Fresnos High School, which is in one of the poorest school districts in Texas. Eighty-nine percent of the students are Latino and more than 80% qualify for free or reduced-price lunches. The state classifies 70% of the student population as “at-risk.”

was labeled a “low performing school” by the state of Texas. The school began to work with HSTW in 1993 to raise graduation requirements and student expectations. The case study summarized in this report charts the achievement gains that ensued.

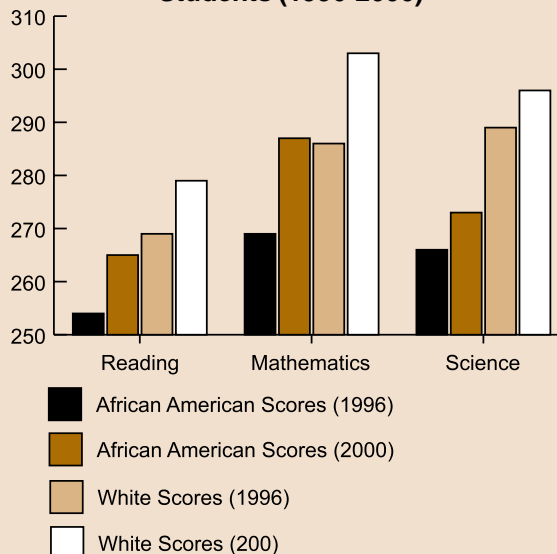
## Key Findings

SREB measures the effectiveness of its high school reform initiative with an HSTW Assessment that is based on the National Assessment of Educational Progress. Gene Bottoms reported changes in the average HSTW Assessment scores for all students in sites that participated in both the 1996 and 2000 HSTW assessment. Average African American student gains slightly exceeded the average gains of white students in reading (11 vs. 10 point gains), mathematics (18 vs. 17 point gains) and science (7 vs. 6 point gains), although an achievement gap did remain in HSTW schools. Scores were significant at the .01 level (see graph).

In 1998, HSTW entered into partnership with 55 urban sites. (The number of HSTW urban schools has since grown.) Between 1998 and 2000, African American students in the 55 original urban sites experienced score increases in reading (from 260 to 264) and science (from 262 to 269) while white scores fell in reading (from 281 to 279) but rose in science (from 295 to 299). As in the HSTW schools nationwide, despite minority student gains, the achievement gap persisted in HSTW urban sites. Reading and science score gains were significant at the .05 level, while math gains were not statistically significant.

At the predominantly Latino Los Fresnos High School, SREB measured student achievement with both the Texas Assessment of Academic Skills (TAAS) and the HSTW Assessment. Between 1993 and 2000, TAAS passing rates for Los Fresnos tenth graders jumped in reading (64% to 91%), writing (74% to 96%) and math (40% to 94%). During that same time period, Los Fresnos High

**Average HSTW Assessment Scores:  
African American and White  
Students (1996-2000)**



School experienced more modest gains on HSTW Assessments, increasing the percentage of students meeting the program's performance goals in reading (30% to 64%), math (50% to 77%) and science (32% to 55%). The HSTW Assessment goals are 279 for reading, 295 for math and 292 for science. Attendance at Los Fresnos rose from 92% in 1993 to 96% in 2000.

Between 1996-98, the percentage of HSTW male students who met performance goals in reading rose from 35% to 44% and scores rose from 266 to 272. Scores rose eight points for white males (from 269 to 274), six points for African American males (from 256 to 262) and four points for Latino males (from 262 to 268).

## Program Components

HSTW is a systemic-change initiative operated through a central intermediary organization, SREB, at a variety of school sites throughout the nation in cooperation with states. In state partnerships, state education officials are asked to assume much of the responsibility for program dissemination, oversight and monitoring. District

and school administrators are also asked to commit to the program and its key components (described below). They must share the overall vision and implementation procedure with local schools and teachers and administer assessment tests with continued guidance from the state and SREB. In exchange, HSTW offers:

- ◆ A model design with key components.
  - ◆ Continuity, guidance and technical assistance – in addition to the national office, an HSTW coordinator, employed by the state, is trained to facilitate most aspects of the program.
  - ◆ Staff development guides.
  - ◆ An annual, professional development conference for teachers and administrators, which provides instructional support and guidance on managing the program.
  - ◆ An HSTW assessment system for students based on a battery of tests drawn from the National Assessment of Educational Progress (NAEP).
  - ◆ Assistance with program evaluation – HSTW conducts evaluations of its schools and compares them to each other on a variety of measures.
  - ◆ Help locating new funding sources.
- With this assistance, HSTW schools are expected to:
- ◆ Set higher expectations and get more students to meet them by having students complete a challenging program of study with an upgraded academic core and career major. The higher expectations include increased graduation requirements for general and vocational track students to include four years of college preparatory English, completion of algebra in middle school, four years of math in high school (including pre-calculus, Algebra III or calculus) and three years of science.
  - ◆ Increase access to intellectually challenging vocational and technical studies, with a major emphasis on using high-level math, science, language arts, problem-solving skills and to academic studies that teach the essential concepts from the college prep curriculum by encouraging students to use academic content and skills to address real-world projects and problems.
  - ◆ Provide work-based learning, collaboratively planned by educators and employers, resulting in an industry-recognized credential and employment opportunities.
  - ◆ Allow common planning time for academic and vocational teachers to work together to provide integrated instruction.
  - ◆ Structure guidance so that each student and his or her parents are involved in a career guidance system.
  - ◆ Provide extra help to assist students who may lack adequate preparation for an accelerated program of study.
  - ◆ Use student assessment and program evaluation data to continuously improve curriculum, instruction, school climate, organization and management.

## **Contributing Factors**

### ***High Expectations***

Students who were required to prepare major research papers, short writing assignments, oral presentations and to read several books a year and use computers to prepare assignments had higher average reading scores than other students. At

successful HSTW sites, high expectations and standards were adopted by general and vocational students, as well as by parents, school staff and the business community. These translated into tough new graduation requirements for English, math and science.

***Specific Learning Strategy***

Evaluators found that improved reading achievement was associated with students taught with a “Preparation, Assistance and Reflection (PAR)” research-based framework. During each lesson, teachers prepare students to read purposefully, assist students with their reading and ask students to reflect on what they have read.

***Continuous Improvement***

Student assessment and program evaluation data were used to continuously improve curricula, instruction, school climate, organization and management – all with the goal of raising student achievement.

**STUDY METHODOLOGY**

All of these studies relied on test results from the HSTW Assessment, as well as statewide test results, school data, site visits and student and staff interviews. The HSTW Assessment is based on a battery of tests drawn from the National Assessment of Educational Progress (NAEP). The 2000 HSTW Assessment was administered to nearly 55,000 high school seniors at HSTW sites across the country.

**EVALUATION & PROGRAM FUNDING**

HSTW is funded by states that, in turn, fund the implementing schools. Funds for special HSTW projects are provided by the Appalachian Regional Commission, the Charles Stewart Mott Foundation, the DeWitt Wallace-Readers Digest Fund, the Novartis US Foundation, Project Lead

the Way, the U.S. Department of Education and the Whitehead Foundation.

**GEOGRAPHIC AREAS**

HSTW is headquartered in Atlanta, GA. By 2001, the HSTW program was in place in more than 1,000 schools in 26 states: AL, AR, DE, FL, GA, HI, ID, IN, KS, KY, LA, MA, MD, MI, MO, NJ, NY, NC, OH, OK, PA, SC, TN, TX, VA and WV.

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