

High Schools That Work in Alabama

A Progress Report



High Schools That Work is a comprehensive, results-based school-improvement initiative of the Southern Regional Education Board-State Vocational Education Consortium. The *High Schools That Work* framework of goals, key practices and key conditions is designed to blend the essential content of traditional college-preparatory studies with quality career/technical studies to raise career-bound students' academic and technical achievement.¹ The initiative currently involves more than 970 public high school sites in 22 states.

The objectives of *High Schools That Work* are:

- # All high school students will meet performance standards necessary for continued learning in a work or educational setting.
- # All high school students will complete a demanding academic core and a career or academic concentration.
- # Necessary state leadership, policies and resources will be provided so that all high school students can meet *High Schools That Work* performance and curriculum standards.

This report describes the progress that Alabama is making in meeting these objectives and recommends further actions for Alabama to take to achieve them fully.

Progress Made and Needed to Achieve the *HSTW* Goals and Objectives

1. Number of Schools	Participating in <i>HSTW</i>			Total number of high schools
	1996	1998	1999	
	14	60 ²	56	468

¹Much of the information in this report is based on career-bound youth. These students are the 60 percent to 65 percent of high school youths who plan to work, attend a two-year technical or community college, enroll in a four-year college or university with an open admissions policy, or enter the military after high school graduation.

²The Alabama Department of Education credits endorsement by the State Superintendent as well as the availability of staff development grants for the increase in the number of sites.

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2.	Percentage of students in participating schools meeting <i>HSTW</i> NAEP-based performance goals ³	1996	1998	High-Scoring Sites ⁴	Goal
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!	Reading ⁵	40%	41%	66%	85%
!	Mathematics ⁶	47%	45%	69%	85%
!	Science ⁷	32%	41%	64%	85%

3.	Percentage of students in participating schools completing the <i>HSTW</i> -recommended curriculum ⁸	1996	1998 ⁹	High-Scoring Sites	Goal
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!	English	40%	33%	42%	100%
!	Mathematics	68%	58%	84%	100%
!	Science	51%	47%	59%	100%
!	All three (English, Mathematics and Science)	23%	22%	35%	100%

4.	Percentage of students in participating schools who scored "below basic" on NAEP-based exams	1996	1998	High-Scoring Sites	Goal
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!	Reading	46%	45%	21%	0
!	Mathematics	15%	10%	2%	0
!	Science	16%	15%	4%	0

³*High Schools That Work* uses National Assessment of Educational Progress (NAEP) 12th-grade tests to measure progress in meeting performance goals. On the NAEP scale of 1 to 500, the reading goal is 279, the mathematics goal is 295 and the science goal is 292.

⁴High-scoring sites are the top 25 percent of *HSTW* sites with the highest average scores in reading, mathematics and science on the *HSTW* Assessment and with students who are demographically similar to Alabama students who participated in the assessment.

⁵Meeting the reading goal means that students can seek and use information from manuals, journals, periodicals and other documents; identify and solve stated problems; and recognize limitations in available information.

⁶Meeting the mathematics goal means that students understand concepts from algebra, geometry and probability; can apply those concepts to solve multi-step problems; and can explain their reasoning in a variety of problem-solving situations.

⁷Meeting the science goal means that students can apply knowledge, skills and reasoning abilities to interpret scientific and technical data from tables and to make inferences about outcomes of experimental procedures; evaluate the appropriateness of the design of an experiment; and interpret scientific text and graphs.

⁸The *HSTW*-recommended academic curriculum includes a minimum of:

- Ⓒ Four credits in English courses with the content and performance standards of college-preparatory English;
- Ⓒ Three credits in mathematics, including two credits in courses with the content and performance standards of college-preparatory Algebra I, geometry, Algebra II and trigonometry; and
- Ⓒ Three credits in science, including two credits in courses with the content and performance standards of college-preparatory biology, chemistry, physics or applied physics.

⁹The decline in the percentage of students completing the *HSTW*-recommended curriculum is due to the addition of 46 new *HSTW* sites.

5. Percentage of students in participating schools who completed at least one semester of algebra or pre-algebra before grade nine	1996	1998	Goal
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Not Available 35% 100%

6. Percentage of students in participating schools who met curriculum and performance goals (Award of Educational Achievement ¹⁰)	1996	1998	High-Scoring Sites	Goal
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14% 17% 36% 80%

7. Percentage of students in participating schools reporting daily or weekly use of academic content to complete vocational assignments	1996	1998	Goal
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! Reading	46%	48%	100%
! Writing	44%	45%	100%
! Mathematics	55%	54%	100%
! Science	32%	33%	60% ¹¹

8. Percentage of students in participating schools reporting:	1996	1998	Goal
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! Reading more than two hours a week	Not Available	23%	100%
! Completing short writing assignments daily or weekly	Not Available	25%	100%
! Doing one or more hours of homework daily	53%	52%	100%
! Most courses contain content already learned	Not Available	55%	0
! Being encouraged to take more challenging mathematics courses	Not Available	50%	100%
! Planning postsecondary study	74%	71%	100%

9. Percentage of students in participating schools reporting:	1996	1998	Goal
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! Meeting with parents and a counselor or a teacher-adviser to plan a program of study	16%	29%	100%
! Needing but not receiving extra help in — mathematics	Not Available	45%	0
— English	Not Available	54%	0
! Taking a mathematics course in senior year	48%	46%	100%

10. Percentage of academic and vocational teachers in participating schools who strongly agree that:	1996	1998	Goal
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! Teachers maintain a demanding yet supportive environment	24%	26%	100%
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¹⁰To qualify for the *High Schools That Work* Award of Educational Achievement, students must score at or above the *High Schools That Work* performance goals in reading, mathematics and science; complete four units in a vocational concentration; and complete two of the three components of *HSTW*'s recommended academic core.

¹¹The science goal is lower because courses in business — a career/technical field that enrolls a large number of students — do not have a scientific base.

that pushes students to do their best			
! Teachers are encouraged to teach more demanding content	Not Available	35%	100%
! Teachers and school administrators work together to improve student achievement	Not Available	39%	100%

11. Percentage of vocational teachers in participating schools reporting that they needed and received staff development in:	Said they needed staff development	Had 21-plus hours in the past three years
! Mathematics content and methods	45%	8%
! Reading and writing for learning	44%	13%
! Science content and methods	50%	6%
! Revising vocational courses to meet national standards	42%	10%
! New teaching methods for getting students to work harder to improve performance	48%	9%

12. Percentage of academic teachers in participating schools reporting that they received staff development in:	Said they needed staff development	Had 21-plus hours in the past three years
! Mathematics content and methods	47%	7%
! Reading and writing for learning	50%	13%
! Science content and methods	39%	9%
! New teaching methods for getting students to work harder to improve performance	54%	8%

13. The state provides:	Status	Recommendation
! Workshops and institutes to upgrade teachers' academic knowledge	Yes	At least two major events of 21-plus hours annually
! Workshops and institutes on new teaching methods	No	At least two major events of 21-plus hours annually
! A series of short-term staff development, site development and networking opportunities to help school leaders and teachers align their practices to <i>HSTW</i>	No	At least two major events annually

The *High Schools That Work* Assessment reveals that Alabama *HSTW* sites face three major challenges. These challenges are:

- # **Improve the reading achievement of career-bound students.** Alabama trails all other *HSTW* states in the percentage of students who read “below basic” on NAEP-based exams – 45 percent in Alabama compared to 36 percent for all other *HSTW* states.

Give career-bound students access to higher-level classes taught to higher standards. Only 33 percent of Alabama's career-bound students complete four years of college-preparatory English. Students who take lower-level English do less reading, writing and analysis.

Improve the academic achievement of minority students. In the 1998 *HSTW* Assessment, Alabama's African-American students scored 18 points below white students in reading, 21 points below them in mathematics and 27 points below them in science. African-American students in Alabama achieve at a level that is significantly lower than that of African-Americans at other *HSTW* sites.

Status of State Leadership, Policies and Support for *High Schools That Work*

Schools make more progress in implementing *High Schools That Work* goals and key practices when certain conditions of leadership and support are present. Alabama's status is summarized below.

<i>HSTW</i> -recommended Conditions	Alabama's status	Meets the <i>HSTW</i> Recommendation
! Equivalent of one full-time state staff person for each 40 <i>HSTW</i> sites	One-half person	No
! Technical assistance visits to one-third of <i>HSTW</i> sites annually	Five sites in 1998-99	No
! Follow-up contacts provided routinely	No	No
! Minimum of \$25,000 annually to each <i>HSTW</i> site	\$4000-plus	No

<i>HSTW</i> -Recommended Graduation Requirements	Alabama State Board of Education Graduation Policy	Meets <i>HSTW</i> Standards
4 units of college-preparatory-level English	4 units of English (no level specified)	No
3 units of mathematics, including 2 at the college-preparatory level	4 units of mathematics, including Algebra I and geometry	Yes
3 units of lab science, including 2 at the college-preparatory level	4 units of science, including biology and physical science (no level specified)	No
4 units in a concentration	No requirement for an academic or career concentration	No

<i>HSTW</i> 's Recommendations for Setting and Assessing High Standards for High Schools	Alabama's Status	Meets <i>HSTW</i> Standards
! The state sets clear, consistent, rigorous content standards for all students in both academic and vocational courses. Accompanying exams measure student achievement.	Beginning in 2001, all students will have to pass a graduation test set at the 11 th grade level. The test covers the four core academic areas. Alabama does not disaggregate data to show the performance of career-bound students.	Partially

! The state tracks and reports test results by district and school and uses the results to focus on helping all students meet higher expectations.

The Stanford Achievement Test, 9th edition, is given in grades three through 11. Alabama uses the results for district and school accountability by assigning academic status to schools and systems. Schools are classified as “Academic Clear” if the majority of students score at the 40th percentile or above, “Academic Caution” if the majority of students score below the 40th percentile and “Academic Alert” if the majority of students score below the 23rd percentile. The state assigns an improvement team to assist schools that are placed on “Academic Alert.”

Partially

Plans for Increasing Participation in *High Schools That Work* and Linking to Broader School-Reform Efforts

The Alabama Department of Education plans to increase the number of *HSTW* sites by 10 per year for the next three years. Each school that applies and is selected will receive \$4,000.

Actions Alabama Can Take to Get 85 Percent of Career-Bound Students at *HSTW* Sites to Meet *HSTW* Performance Goals

Revise state graduation policies to require:

- ! Four units of college-preparatory English aligned to the standards of the Council for Basic Education.¹²
- ! Three of four mathematics credits in courses with the content and performance standards of college-preparatory Algebra I, geometry and Algebra II. All students should take at least pre-algebra prior to grade nine.
- ! Two of four science courses at the college-preparatory level (biology, chemistry, physics or applied physics).
- ! An academic or career concentration of four credits in addition to the academic core.

Raise the quality of teaching in vocational classes by:

- ! Requiring teacher-education institutions to strengthen the mathematics, language arts and science skills of students preparing to become vocational teachers.
- ! Requiring all future vocational teachers to receive a degree with solid mathematics and science preparation in addition to a teaching major.
- ! Offering at least 40 hours of staff development to upgrade the academic skills of current vocational teachers. The staff development should include:
 - ¶ Mathematics content and methods of integrating mathematics into technical courses;

¹²The Council for Basic Education has developed rigorous language-arts standards that include some specificity in the amount, complexity and variety of reading and writing that should be expected of students. These standards also emphasize higher-order thinking skills in relation to reading and writing. When compared with the Council for Basic Education standards, no SREB state received a grade of A and only one received a B. (“Quality Counts 98,” *Education Week*, Jan. 8, 1998; <http://www.edweek.org/sreports/qc98/>)

- Ⓒ Reading for learning across content areas;
- Ⓒ Science content and methods of integrating science into technical courses (especially for teachers in programs that have a science base).

Expand and strengthen state and local institutes and workshops to:

- ! Help schools align the language arts curriculum to Council for Basic Education standards and help all teachers make reading and writing for learning a priority by:
 - C Having language arts teachers take the lead to raise standards in language arts courses and to involve the entire faculty in increasing the amount of reading, writing, analyzing and presenting done by high school students.
 - C Providing in-depth training for all academic and vocational teachers in strategies to engage students actively in reading, writing, speaking, listening and thinking to learn subject matter. Such practices help students develop lifelong learning skills.
 - C Having high school students read the equivalent of at least 30 books per year, including textbooks, literature, scientific articles and technical documents. Students should be able to comprehend, analyze, interpret, compare and critique works from all subject areas.
 - C Requiring students to write daily in all classes in a variety of styles, including summary, interpretation, persuasion, reflection, narration, creative and analytical essay. At least one formal writing assignment per week should be graded; however, frequent informal, ungraded reflective writing should be done in all subject areas.
 - C Having students revise all formal written work until it meets standards developed through the leadership of the language arts department.
 - C Engaging all students in reading and analyzing textbooks and other materials daily and in defending their interpretations individually and/or in groups.
 - C Expecting students routinely to gather and use information that supports a particular point of view. This information should be presented formally in a research paper or presentation and informally in classroom discussion or debate.
- ! Improve all teachers' knowledge of their teaching field content and how to use appropriate research-based instructional methods.

Expand the extra-help system to enable students to complete an accelerated program of high school studies by:

- ! Requiring "double doses" of mathematics and English language arts courses for students entering grade nine unprepared for high school work;
- ! Requiring summer school after grade eight to focus on individual student deficiencies;
- ! Providing required before- and after-school extra-help sessions for students having difficulty in meeting the standards in core academic subjects, particularly mathematics and reading.

Make schools accountable for improving the academic and technical achievement of students completing career/technical studies by:

- ! Disaggregating data on career-bound students from the Stanford 9 Achievement Test and high school graduation exams and requiring high schools to implement intervention plans for increasing the percentage of these students who meet the standards of the Stanford 9 test and pass the graduation exams.
- ! Measuring progress toward technical literacy¹³ by reporting on indicators such as the percentage of 12th-graders meeting the standards of a quality senior project, the number of students completing industry-certified programs, and (long-range) the percentage of students passing written and/or performance-based technical literacy exams administered by the state.
- ! Collecting and reporting follow-up data on students who complete a career concentration. The data may include placement rates,

¹³Technical literacy is the ability to 1) apply academic knowledge and skills to a broad field of technical studies; 2) read, understand and communicate in the language of the technical field; 3) understand technical concepts and principles; and 4) use technology to complete projects in a specific career/technical field.

wages and earnings of graduates who work, continuing education rates, and the percentage of youths prepared to do postsecondary studies.

- ! Requiring schools to track and reduce the percentage of career-bound students who need to take remedial or developmental courses at postsecondary institutions.

Increase the number of schools participating in *HSTW* by:

- ! Requiring all high schools to adopt a research-based improvement design for raising the achievement of all students;
- ! Providing at least \$25,000 annually to each school site to support staff development, student assessment and curriculum and instructional planning; and
- ! Assigning highly experienced educators to a support team to work with high school reform.