High Schools That Work:

What does it look like fully implemented?
Model Fully Implemented:
85 Percent of Graduates Meet One or More Performance Goals

Status 2002 at 978 Schools

<table>
<thead>
<tr>
<th>Status</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>85% of students</td>
<td>34</td>
<td>4%</td>
</tr>
<tr>
<td>65 to 84% of students</td>
<td>350</td>
<td>36%</td>
</tr>
<tr>
<td>50 to 64% of students</td>
<td>309</td>
<td>31%</td>
</tr>
<tr>
<td>Below 49%</td>
<td>285</td>
<td>29%</td>
</tr>
</tbody>
</table>
## Model Fully Implemented: 80 Percent
Enroll in Further Study Immediately

### Status of More Than 5,900 National Representatives

<table>
<thead>
<tr>
<th>Sample of 2000 Graduates</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>64%</td>
<td>74%</td>
</tr>
</tbody>
</table>

### Type of Institution:

<table>
<thead>
<tr>
<th>Institution</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>University or college</td>
<td>29</td>
<td>36</td>
</tr>
<tr>
<td>Community and technical college</td>
<td>32</td>
<td>35</td>
</tr>
<tr>
<td>Other/unknown</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>
Model Fully Implemented: 85 Percent Entering Postsecondary Studies without Having to Take Remedial Courses

Required to take remedial courses 34%
Completed recommended curriculum 27
Did not complete recommended curriculum 40
Qualified for Award of Educational Achievement 22
Did not qualify for Award of Educational Achievement 42
<table>
<thead>
<tr>
<th>Completed:</th>
<th>Needed remedial Courses</th>
<th>Postsec. Attend.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algebra before grade 9</td>
<td>14%</td>
<td></td>
</tr>
<tr>
<td>Completed four CP mathematics credits</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Took mathematics the senior year</td>
<td>27</td>
<td>75%</td>
</tr>
<tr>
<td>Did not take mathematics the senior year</td>
<td>34</td>
<td>64</td>
</tr>
</tbody>
</table>

Source: Southern Regional Education Board Follow-up Study of 2000 high school career/technical Graduates 15 months after high school graduation, Report 2002
Model Fully Implemented: 85 Percent Completed Recommended Academic Core
Orangeburg 5 High School, SC

- College-prep English (4 credits) 95%
- Mathematics (4 credits, Algebra I or higher) 87%
- Science (3 credits at college-prep level) 100%
- Completed all three parts 84%
Model Fully Implemented: 60 Percent
Experience Intensive High Classroom Expectations

Academy for Arts and Science, SC

State amount and quality of work for an A or a B 77%
Teachers frequently available for extra help 95%
One or more hours of homework (daily) 47
Revise written work (often) 72
Work hard to meet high standards (often) 57
Intensive (4 of 5) 55
Model Fully Implemented: 60 Percent
Experience Intensive Technical Literacy
through Career Studies
Hanna Westside, SC

Complete 4 or more technical courses (quality) 96%
Use computer to complete assignments (monthly) 72%
Talk with persons from chosen field 63%
Had challenging assignments (monthly) 64%
Model Fully Implemented: 60 Percent Experience Intensive Technical Literacy through Career Studies

Hanna Westside, SC

Use mathematics (weekly) 41%

Read technical materials (weekly) 47

Read related articles (monthly) 56

Do research to plan a project 78
Model Fully Implemented: 60 Percent
Experience Intensive Technical Literacy through Career Studies
Hanna Westside, SC

Two or more hours on career/technical math-related homework **(weekly)**

- Senior project: 92%
- End-of-course exams: 59%
- Outside reading: 33%
- Intensive (8 of 12): 51%
Model Fully Implemented: 75 Percent
Experience Intensive Work-site Learning
Monroe County High School, KY

- Observed veteran workers: 100%
- Someone taught me how to do the work: 100%
- Encouraged me to develop good work habits (monthly): 100%
- Encouraged me to develop good customer relations skills (monthly): 100%
- Intensive (all 4 indicators): 100%
Southern Regional Education Board

Model Fully Implemented: 75 Percent Experience Intensive Literacy
Galax High School, VA

Revise written work for quality 46% (often)
Write in-depth explanations 62 (sometimes or often)
Complete short writing
  in English (monthly) 85
  in science (monthly) 54
  in social studies (monthly) 54

Source: 2002 HSTW Assessment
Model Fully Implemented: 75 Percent Experience Intensive Literacy
Galax High School, VA

Use word processor (often) 62%
Discuss topics with other students 69%
(sometimes or often)
Read books outside of class 53%
(monthly)
Read technical materials in class 79%
(monthly)
Read outside of school (two hours weekly) 31%
Intensive (7 to 10) 48%

Source: 2002 HSTW Assessment
Model Fully Implemented: 65
Percent Experience Intensive Numeracy
Buford High School, GA

Mathematics the senior year  100%

4 or more mathematics  100 courses
Model Fully Implemented: 65 Percent Experience Intensive Numeracy
Buford High School, GA

Teachers link math to real-life problems (sometimes or often) 72%

Work-related math problems (monthly) 29

Use math in career/technical assignments (monthly) 57

Solve problems outside textbook (monthly) 71
Model Fully Implemented: 65 Percent
Experience Intensive Numeracy
Buford High School, GA

Explain processes orally (monthly) 41%
Work with others on assignments (monthly) 53%
Brainstorm to solve problems in groups (monthly) 70%
Solve open-ended problems 79%
Use graphing calculator (monthly) 73%
Intensive (6 to 8) 54%
Model Fully Implemented: 65 Percent
Experience Intensive Science Curriculum
POLYTECH High School, DE

Completed at least 3 of the following: 5 science (CP physical science, CP biology, Biology II, anatomy, CP chemistry, physics) 83%

Took science the senior year 34

Science teachers often show how scientific concepts are used in real-life situations 37
Model Fully Implemented: 65 Percent
Experience Intensive Science Curriculum

POLYTECH High School, DE

Use science equipment to do science activities in a lab with table and sinks (weekly) 69%

Read an assigned book (other than text book) or article dealing with science (at least monthly) 66

Use science equipment to do science activity in the classroom (at least monthly) 88
Model Fully Implemented: 65 Percent Experience Intensive Science Curriculum
POLYTECH High School, DE

- Worked with one or more students in classroom on science work *(at least monthly)*: 88%
- Prepared a written report on science project *(at least monthly)*: 85%
- Intensive (6-8): 55%
Model Fully Implemented: 70 Percent
Experience Intensive Guidance
Orangeburg 5 High School, SC

Teacher or counselor:
- talked with students individually 96%
  about plans for careers or further learning
- helped students review their programs of study (annually) 84%
- visited classes to talk about planning for post-high school 98%
Model Fully Implemented: 70 Percent
Experience Intensive Guidance
Orangeburg 5 High School, SC

Each student had an adult mentor 42% throughout high school

Mentors helped students develop 62 and review programs of study (annually)

Students participated in tours of 75 local businesses
Model Fully Implemented: 70 Percent
Experience Intensive Guidance
Orangeburg 5 High School, SC

Students spoke with persons in careers to which they aspired 87%

Someone from a college talked to students about going to college 80

Student and parents received information to assist in applying to college 82
Model Fully Implemented: 70 Percent
Experience Intensive Guidance
Orangeburg 5 High School, SC

Students received information on how to do well in job interviews 82%

Students received information and counseling about continuing their education 67%

Students received encouragement to take a combination of academic and career/technical courses 95%

Intensive (10-12) 58%
Model Fully Implemented: 60 Percent See High School Important to Their Future
Los Fresnos High School, TX

Courses are exciting/challenging (often or sometimes) 85%
Tried to do their best work in school (often) 75
Failed to complete or turn in assignments (seldom/never) 72
Very important to study hard to get good grades 84
Very important to participate actively in class 60
Model Fully Implemented: 60 Percent See High School Important to Their Future
Los Fresnos High School, TX

Very important to attend all classes 93%

Very important to take several college-preparatory classes 74%

Teachers encouraged them to do well in school (often) 64%

Teachers showed they cared about students by not letting them get by without doing the work (often) 53%

Intensive (8 of 11) 63%
Model Fully Implemented: 60 Percent Received Extra Help
Swain County, NC

<table>
<thead>
<tr>
<th>Statement</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Get extra help without difficulty from my teacher (often)</td>
<td>56%</td>
</tr>
<tr>
<td>Extra help available before, during or after school (often)</td>
<td>79</td>
</tr>
<tr>
<td>Extra help results in getting better grades</td>
<td>65</td>
</tr>
<tr>
<td>Extra help assists in understanding school work better</td>
<td>49</td>
</tr>
<tr>
<td>Intensive (3 of 4)</td>
<td>58</td>
</tr>
</tbody>
</table>
Model Fully Implemented: 65 Percent of Teachers Report Intensive School Improvement

Destrehan High School, LA

Continuous Improvement Practices

Goals are clear.  65%

Teachers maintain a demanding and supportive environment.  63%

Principals meet with teachers to examine student work.  (monthly)  69
Model Fully Implemented: 65 Percent of Teachers Report Intensive School Improvement

Destrehan High School, LA

Continuous Improvement Practices

Teachers continue to learn and seek out new ideas 78%

Teachers/administrators work as a team 55

Teachers use data to evaluate school and classroom practices 93

Intensive (4 of 6) 51
## Summary of Key State Policies

<table>
<thead>
<tr>
<th>State</th>
<th># Math Req.</th>
<th>Includes Algebra</th>
<th>Algebra &amp; beyond</th>
<th>Algebra Plus 2</th>
<th>No General Strand</th>
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<tbody>
<tr>
<td>AL</td>
<td>4</td>
<td>✓</td>
<td>✓</td>
<td>✓ for CP</td>
<td></td>
</tr>
<tr>
<td>AR</td>
<td>3</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>DE</td>
<td>3</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FL</td>
<td>3</td>
<td>✓</td>
<td>✓ for Std &amp; CP</td>
<td></td>
<td></td>
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<tr>
<td>GA</td>
<td>4 CP; 3TP</td>
<td>✓</td>
<td>✓ for CP</td>
<td>✓ for CP</td>
<td>✓</td>
</tr>
<tr>
<td>KY</td>
<td>3</td>
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<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LA</td>
<td>3</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MD</td>
<td>3</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MS</td>
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<td>✓</td>
<td></td>
<td></td>
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<tr>
<td>NC</td>
<td>3</td>
<td>✓</td>
<td>✓ for CP &amp; TP</td>
<td>✓ Univ ('06)</td>
<td>✓</td>
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<tr>
<td>OK</td>
<td>3</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>SC</td>
<td>4</td>
<td>✓</td>
<td>✓</td>
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<td></td>
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<tr>
<td>TN</td>
<td>3</td>
<td>✓</td>
<td>✓ ('05)</td>
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<tr>
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<td>✓</td>
<td>✓ ('05)</td>
<td>✓ CP</td>
<td>✓“default”</td>
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<td>WV</td>
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<td>✓</td>
<td>✓ ('05)</td>
<td>✓ ('05)</td>
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Improvement: Are test scores improving?

<table>
<thead>
<tr>
<th>SAT-Dominant States</th>
<th>1993*</th>
<th>2003</th>
<th>Score Change</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>% %</td>
<td>Mean</td>
<td>% %</td>
</tr>
<tr>
<td>Tested</td>
<td>Score</td>
<td>Tested</td>
<td>Score</td>
</tr>
<tr>
<td>Nation</td>
<td>42</td>
<td>1012</td>
<td>48</td>
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<tr>
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<td>50</td>
<td>992</td>
<td>67</td>
</tr>
<tr>
<td>GA</td>
<td>67</td>
<td>964</td>
<td>72</td>
</tr>
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<td>MD</td>
<td>63</td>
<td>1019</td>
<td>69</td>
</tr>
<tr>
<td>NC</td>
<td>59</td>
<td>970</td>
<td>69</td>
</tr>
<tr>
<td>SC</td>
<td>64</td>
<td>958</td>
<td>65</td>
</tr>
<tr>
<td>TX</td>
<td>49</td>
<td>995</td>
<td>53</td>
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<tr>
<td>VA</td>
<td>66</td>
<td>1004</td>
<td>69</td>
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</table>

*Recentered Scores
## Improvement: Are test scores improving?

### ACT- Dominant States

<table>
<thead>
<tr>
<th></th>
<th>1993</th>
<th>2003</th>
<th>Score Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>Mean Score</td>
<td>%</td>
</tr>
<tr>
<td>Nation</td>
<td>34</td>
<td>20.6</td>
<td>39</td>
</tr>
<tr>
<td>AL</td>
<td>62</td>
<td>20.0</td>
<td>77</td>
</tr>
<tr>
<td>AR</td>
<td>64</td>
<td>20.1</td>
<td>76</td>
</tr>
<tr>
<td>KY</td>
<td>63</td>
<td>20.1</td>
<td>72</td>
</tr>
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<td>LA</td>
<td>72</td>
<td>19.5</td>
<td>81</td>
</tr>
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<td>MS</td>
<td>71</td>
<td>18.8</td>
<td>89</td>
</tr>
<tr>
<td>OK</td>
<td>65</td>
<td>19.7</td>
<td>73</td>
</tr>
<tr>
<td>TN</td>
<td>63</td>
<td>20.2</td>
<td>90</td>
</tr>
<tr>
<td>WV</td>
<td>57</td>
<td>19.9</td>
<td>65</td>
</tr>
</tbody>
</table>
Key Drivers of Historical Success

- Align graduation policies to *HSTW* Design
- End general track
- Use data
- Link academic and career/technical instruction
Key Drivers of Historical Success

- Exposing school leaders and faculty teams to a common vision, goals and workable practices through:
  - Site development workshops
  - National summer staff development conferences
  - National workshops
  - Publications
Key Drivers of Historical Success

- Using audit teams to assist schools to document:
  - outstanding practices
  - planned next steps
  - challenges to more fully implement the design with recommended actions
Key Drivers of Historical Success

- State and districts funding support
- State ownership
- Flexible scheduling
Key Drivers of Historical Failure/Inconsistency

- Project strategy versus comprehensive strategy
- Turnover of key leaders
- Failure of school to avail themselves of networking services
Key Drivers of Historical Failure/Inconsistency

- Lack of school leadership to organize, engage and manage continuous improvement
- Inability to assist the faculty to unlock from old beliefs and practices
Key Drivers of Historical Failure to Deeply Implement the Design

- Inability to go beyond initial improvement
- Failure to develop deeper understanding among the faculty of what represents good teaching
Key New Drivers of Success

- Developing local district and school leadership teams
- Middle grades/high school transitions
- Literacy across the curriculum
Key New Drivers of Success

- Assignment of district and school improvement consultants
- Site development workshops for the entire faculty
- Site-specific staff development
Emerging Drivers of Success

- Redesigning the senior year
- Improving rigor of classroom instruction and teaching strategies
- Teaching “at-risk” students how to become independent learners
Emerging Drivers of Success

- Making school completion as important as improving student achievement
- Organizing large schools into smaller learning communities
- Improving high school career/technical instruction