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Using Data to Set Priorities for Teaching and Learning – Unwrapping the 2006 *HSTW* Assessment Report

**Illinois Data Workshop
December 12-13, 2006**

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Using Data to Take Action

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High School Reform from a National Perspective

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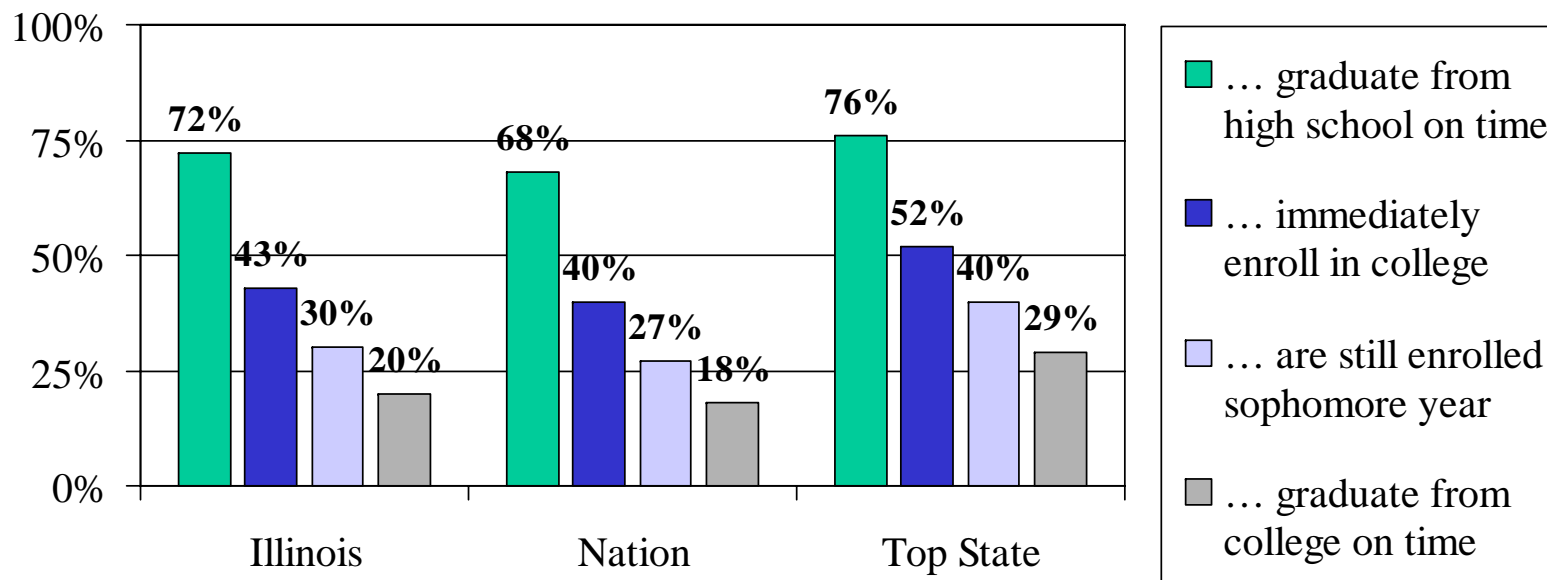
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- High school reform is a popular national focus
- How we keep score is changing
 - Student achievement
 - Student completion rate
- What we do will change as the way we keep score changes

How many 9th graders make it to, and through, college?

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Missed Opportunities (2002): Of every 100 ninth graders, the percent who ...



Source: Achieve, Inc., American Diploma Project. "Achieve Data Profile: Georgia," April 2006.

Twenty Years of Study in the National Network:

*Some HSTW Schools are Improving and
Some are Not*

- **Closing the knowing and doing gap**
 - Why – before – how or what
 - Knowing comes from doing
 - Actions count more than plans
 - There is no doing without mistakes
 - Measure what matters
 - What leaders do matters
- ***HSTW – Students Can't Wait: High Schools Must Turn Knowledge into Action***

Building District Capacity to Support Schools in Implementing the *HSTW* Design

- **Vision that shows up in actions**
- **Use of data**
 - Assess where we are
 - Set targets
- **Align resources**
 - Targeted PD for the school
 - Capacity within the district office
 - Making use of outside providers
- **Measure progress and hold adults accountable**

HSTW Key Practices

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- High Expectations
- Program of Study
- Academic Studies
- Career/technical Studies
- Work-based Learning
- Teachers Working Together
- Students Actively Engaged
- Guidance
- Extra Help
- Culture of Continuous Improvement

The Degree of *HSTW* Design Implementation Makes a Difference for Students

- **Comparison of two sets of 75 schools using 2002 and 2004 data**
 - Similar ethnicity
 - Similar sizes
 - Similar locations – Urban, Suburban, Rural
 - Similar parent education
- **One group made statistically significant gains in achievement, the other did not**

Implementation Differences Result in Achievement Differences

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	Non- improved Schools	Most- improved Schools
Reading	- 9	+ 11
Mathematics	- 7	+ 11
Science	- 11	+ 17

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Source: "Students Can't Wait", SREB, 2006.

The Essential Question

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Why do students at most-improved schools make greater gains in achievement than students at non-improved schools?

The Detailed Answer

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More students at most-improved schools:

- Completed the *HSTW*-recommended curriculum in reading, math and science
- Experienced high expectations in the classroom
- Experienced reading, writing and math skills across the curriculum
- Were engaged in science
- Experienced quality career/technical studies and work-based learning
- Had access to quality extra help and guidance
- Understood the importance of learning and doing well in high school

The Short Answer

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The most-improved schools more fully implemented the *HSTW* Design –
They *took action* to increase student achievement.

Workshop Objectives

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- **Beliefs:** Understand that actions (degree of implementation) makes a difference
- Understand the *HSTW Assessment Report*
- Determine where we are and develop perspective
- Find positive trends and link to behaviors
- Find challenges and identify actions to take
- Identify strategies to roll data, strategies, plans, and targets out to the whole faculty

Workshop Deliverables

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- Identify your school's successes
- Identify your school's challenges
- Link your data to your behavior
- Identify specific actions to address the challenges
- Draft an Action Plan (School Improvement Plan)
- Develop a communication plan for
 - Data
 - Targets
 - Action Plan (School improvement Plan)

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Overview of the *HSTW* Assessment and Assessment Report

2006 *HSTW* Assessment

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- **NAEP-referenced subject tests**
 - Reading, Mathematics, Science
 - Scale 0-500
- **Student Survey**
 - Course History
 - School and Classroom Experiences
- **Teacher Survey**

- Administered to all or a random sample of 60+ seniors in January/February 2006
- Reports produced by Educational Testing Service – Mailed August, 2006
- Data/Survey linked to *HSTW* Key Practices

2006 Assessment Participation

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- **2006 *HSTW* Assessment**
 - 1,028 schools
 - 61,815 students
 - 50,439 teachers
- **2006 Middle Grades Assessment**
 - 226 schools
 - 14,678 students
 - 7,657 teachers
- **2006 Illinois Sites**
 - 21 schools
 - 1,318 All Students (completed all 3 assessments)
 - 830 CT Students
 - 1,631 Teachers

2006 *HSTW* Assessment Report Contents

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- Preface and Appendix
- Indices
- Benchmarks
- Student Tables
- Teacher Survey results

2006 *HSTW* Assessment Report

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- **Preface and Appendix**
 - Key information on reading tables and interpreting results
 - Definition of high-scoring sites in your category
 - When data is not reported
 - Performance goals (p. iii)
 - *HSTW*-recommended curriculum
 - Proficiency levels (p. 230-233)
 - Detailed information on design and content of subject tests

2006 *HSTW* Assessment Report

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- **Indices**
 - Clusters of related variables
 - Predictive of student achievement
 - Related to *HSTW* Key Practices

Emphasis on High Expectations

Students were asked to report on activities related to high expectations. The following five items were examined to produce a composite index.

Students report that:

- Their teachers clearly indicated the amount and quality of work that are necessary to earn a grade of "A" or "B" at the beginning of a project or unit **often**.
- Their teachers were **frequently** available before, during or after school to help them with their studies.
- They usually spent, overall, **one or more hours** on homework each day.
- They revised their essays or other written work several times to improve their quality **often**.
- They worked hard to meet high standards on assignments **often**.

Emphasis on High Expectations	All Assessed Students at Your Site			Assessed Students Attending High-scoring Sites in Your Category (2006)				
	%	Mean Reading Score	Mean Mathematics Score	Mean Science Score	%	Mean Reading Score	Mean Mathematics Score	Mean Science Score
▲ Intensive (4 to 5 of the above items)	17	289	309	302	25	299	321	314
▲ Moderate (2 to 3 of the above items)	44	281	302	296	45	295	318	313
▲ Low (1 or none of the above items)	38	272	296	288	29	293	316	313
▲ Incomplete Data ¹	1	--	---	---	2	--	--	---

¹Students did not respond to one or more of the components of the index.

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- **Benchmarks**
 - Set goals
 - Document progress over time
 - SREB Publication: “Establishing Benchmarks for New and Maturing *HSTW* Sites”

Indicators — High Expectations	Baseline	+2 Years	+4 Years	+6 Years	+8 Years	10-year Goal
7. The percentage of student responses on five indicators that suggest the school has an intensive emphasis on high expectations. (four to five items)	35	40	45	50	55	60%
8. Students report that their teachers often clearly indicated the amount and quality of work that are necessary to earn a grade of an A or a B at the beginning of a project or unit.						85%
9. Students report that their teachers were frequently available before, during or after school to help them with their studies.						80%
10. Students report that they usually spend one or more hours on homework each day.						80%
11. Students report that they often revise their essays or other written work several times to improve their quality.						80%
12. Students report that they have worked hard to meet high standards on assignments often.						60%
13. Students report that their teachers often set high standards and are willing to help them meet them.*						75%

Source: Benchmark Section of *HSTW Assessment Report*

Emphasis on High Expectations, Perceived Importance of High School Studies and Extra Help

- **High Expectations** -- Setting higher expectations and getting more students to meet them.
- **Perceived Importance of High School Studies** -- Helping students understand the importance of using high school to prepare for the future.
- **Extra Help** -- Providing a structured system of extra help to enable career-bound students to successfully complete an accelerated program of study that includes high-level academic content and a major.

High Expectations	Table Reference	Site All Students	Site CTE Students	Goal
The percentage of student responses on five indicators that suggest the school has an intensive emphasis on high expectations. (4 to 5 items)	Indices	17%	16%	60%
Mean Score - Reading		289	287	
Mean Score - Mathematics		309	307	
Mean Score - Science		302	300	
Students report that their teachers often clearly indicated the amount and quality of work that are necessary to earn a grade of "A" or "B" at the beginning of a project or unit.	Table 24	47%	46%	85%
Mean Score - Reading		283	282	
Mean Score - Mathematics		304	302	
Mean Score - Science		297	295	
Students report that their teachers were frequently available before, during or after school to help them with their studies.	Table 28	57%	56%	80%
Mean Score - Reading		282	280	
Mean Score - Mathematics		304	302	
Mean Score - Science		297	295	

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- **Student Tables**
 - Summary of results
 - Reading, mathematics and science achievement
 - Achievement disaggregated by survey results
 - Grouped by *HSTW* Key Practices

Table 1

Summary of Mean Scores and Percentage of Students Meeting Performance Goals

The 2006 High Schools That Work Assessment

Report: 96001 - All HSTW Sites
 Your School Category: A
 Group: All Students

Reading Goal: 279
 Mathematics Goal: 297
 Science Goal: 299

	2006 Site		2004 Site		2006 High-scoring Sites in Your Category		2006 All Sites	
	All Students	CTE Students	All Students	CTE Students	All Students	CTE Students	All Students	CTE Students
Reading Mean Score	278 (0.1)	277 (0.2)	278 (0.1)	276 (0.2)	295 (0.5)	293 (0.7)	279 (0.1)	277 (0.2)
Mathematics Mean Score	300 (0.1)	298 (0.2)	299 (0.1)	297 (0.2)	318 (0.5)	315 (0.7)	301 (0.1)	299 (0.2)
Science Mean Score	292 (0.2)	290 (0.2)	291 (0.2)	289 (0.2)	313 (0.6)	311 (0.8)	293 (0.2)	292 (0.2)
<u>Percent Reaching Goal:</u>								
Reading (279)	54%	53%	53%	51%	78%	75%	55%	53%
Mathematics (297)	60%	59%	58%	55%	84%	82%	61%	60%
Science (299)	47%	46%	47%	44%	71%	70%	48%	47%

Asterisks indicate that mean scores and standard errors of measurement were not computed for a given subject area in 2004.

The scale for each subject is 0 to 500. The numbers in () are the standard errors. Information about finding significant differences between scores can be found in the Appendix. All percentages have been rounded to whole numbers. Percentages less than .5 have been rounded to zero.

Table 24

Student Achievement by Perceptions of Schoolwork and Teacher Expectations

The 2006 High Schools That Work Assessment

Report: 96001 - All HSTW Sites
 Your School Category: A
 Group: All Students

Reading Goal: 279
 Mathematics Goal: 297
 Science Goal: 299

	<u>%</u>	2006 Site			<u>%</u>	2004 Site			2006 High-scoring Sites in Your Category <u>%</u>
		<u>Reading Mean</u>	<u>Mathematics Mean</u>	<u>Science Mean</u>		<u>Reading Mean</u>	<u>Mathematics Mean</u>	<u>Science Mean</u>	
Courses Have Been Exciting and Challenging									
All Students									
Never	4	260 (0.8)	284 (0.8)	275 (1.0)	5	263 (0.7)	287 (0.7)	277 (0.9)	3
Seldom	19	275 (0.3)	299 (0.3)	291 (0.4)	21	275 (0.3)	298 (0.3)	291 (0.4)	16
Sometimes	59	280 (0.2)	302 (0.2)	295 (0.2)	57	280 (0.2)	301 (0.2)	294 (0.2)	59
Often	18	281 (0.3)	302 (0.3)	295 (0.4)	17	281 (0.3)	302 (0.3)	295 (0.4)	22
CTE Students									
Never	4	260 (0.9)	283 (1.0)	275 (1.1)	5	262 (0.8)	285 (0.8)	276 (1.0)	2
Seldom	19	274 (0.4)	298 (0.4)	290 (0.5)	21	273 (0.4)	296 (0.3)	289 (0.5)	16
Sometimes	58	279 (0.2)	300 (0.2)	293 (0.3)	57	278 (0.2)	299 (0.2)	292 (0.3)	58
Often	18	280 (0.4)	300 (0.4)	293 (0.5)	17	279 (0.4)	299 (0.4)	292 (0.5)	23
Teachers Set High Standards and Were Willing to Help Me Meet Them									
All Students									
Never	5	265 (0.6)	288 (0.6)	279 (0.8)	6	265 (0.6)	288 (0.6)	279 (0.8)	3
Seldom	17	274 (0.3)	297 (0.3)	290 (0.4)	19	274 (0.3)	297 (0.3)	290 (0.4)	13
Sometimes	40	279 (0.2)	302 (0.2)	295 (0.3)	40	279 (0.2)	301 (0.2)	294 (0.3)	42
Often	38	282 (0.2)	303 (0.2)	296 (0.3)	36	282 (0.2)	302 (0.2)	295 (0.3)	42
CTE Students									
Never	5	264 (0.7)	286 (0.8)	278 (1.0)	6	264 (0.7)	287 (0.7)	278 (0.9)	3
Seldom	17	273 (0.4)	296 (0.4)	289 (0.5)	19	273 (0.4)	296 (0.4)	288 (0.5)	13
Sometimes	40	278 (0.2)	300 (0.2)	293 (0.3)	40	277 (0.2)	299 (0.2)	292 (0.3)	41
Often	37	280 (0.2)	301 (0.3)	294 (0.3)	35	280 (0.2)	300 (0.3)	293 (0.3)	43

The scale for each subject is 0 to 500. The numbers in () are the standard errors. Information about finding significant differences between scores can be found in the Appendix. All percentages have been rounded to whole numbers. Percentages less than .5 have been rounded to zero.

2006 *HSTW* Assessment Report

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- **Teacher Survey Results**
 - Overview
 - Implementation Focus Level Summary
 - Results grouped by Key Practices

VIII. TEACHERS' PERCEPTIONS ON CONTINUOUS SCHOOL IMPROVEMENT¹

Providing staff development opportunities for teachers helps them to learn and master new research-based instructional practices, reflect on what they have learned and share responsibility in applying new knowledge as they plan meaningful assignments. In addition to the importance of staff development, teachers must also perceive that their school is engaging in continuous improvement. It is their belief in these school improvement methods that will make school improvement efforts successful.

Your Site	All Sites	Teachers reported that:
40%	40%	They strongly agree that the goals and priorities for their school are clear.
34	34	They strongly agree that teachers in this school maintain a demanding yet supportive environment that pushes students to do their best.
40	40	The principal stresses that all students should be taught to the same high standards monthly .
42	42	They strongly agree that teachers in this school are continually learning and seeking new ideas on how to improve students' achievement.
37	37	They strongly agree that teachers and school administrators work as a team to improve student achievement at their school.
28	28	They strongly agree that teachers use data reports to continuously evaluate the school's academic and technical programs and activities.

¹This index is not included in the Implementation Focus Level Table on page 193.

Questions?

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- Questions and/or suggestions for the report may be directed to:

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Actions to Advance Student Achievement

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Activity

- What actions has your school, district or state taken in the last two years to advance student achievement?
- Go around the room and write down the one or two big things your school has done.

Activity - Categories

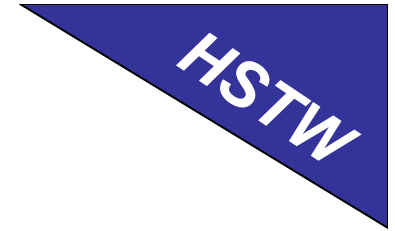
- Engaging the faculty
- Having more students complete a rigorous curriculum
- Having higher expectations and/or providing extra help
- Providing quality C/T studies and/or work-based learning
- Literacy across the curriculum
- Numeracy across the curriculum
- Engaging science practices
- Providing guidance and advisement

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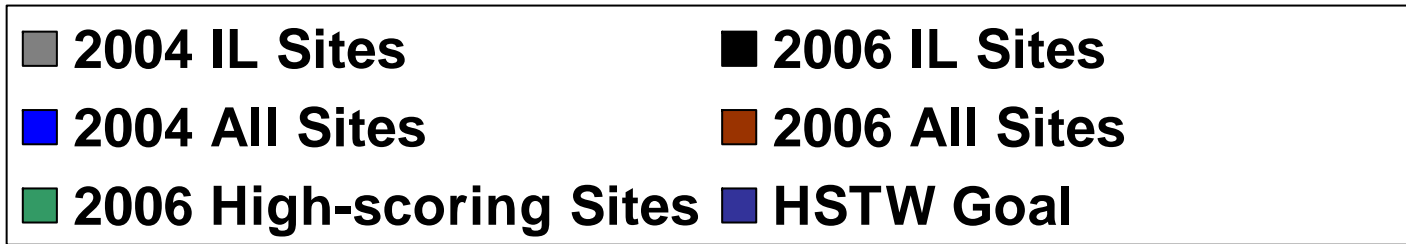
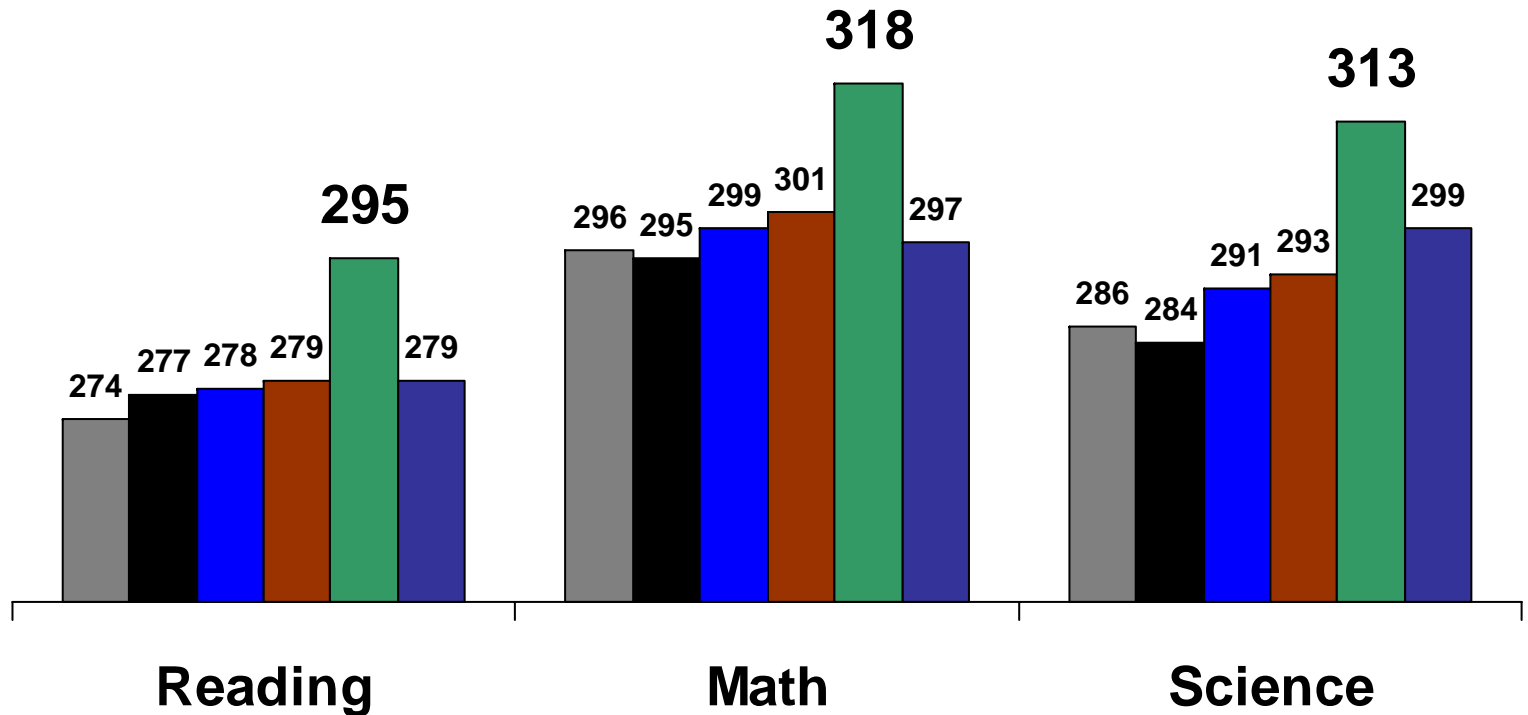
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Painting a Picture of Student Learning

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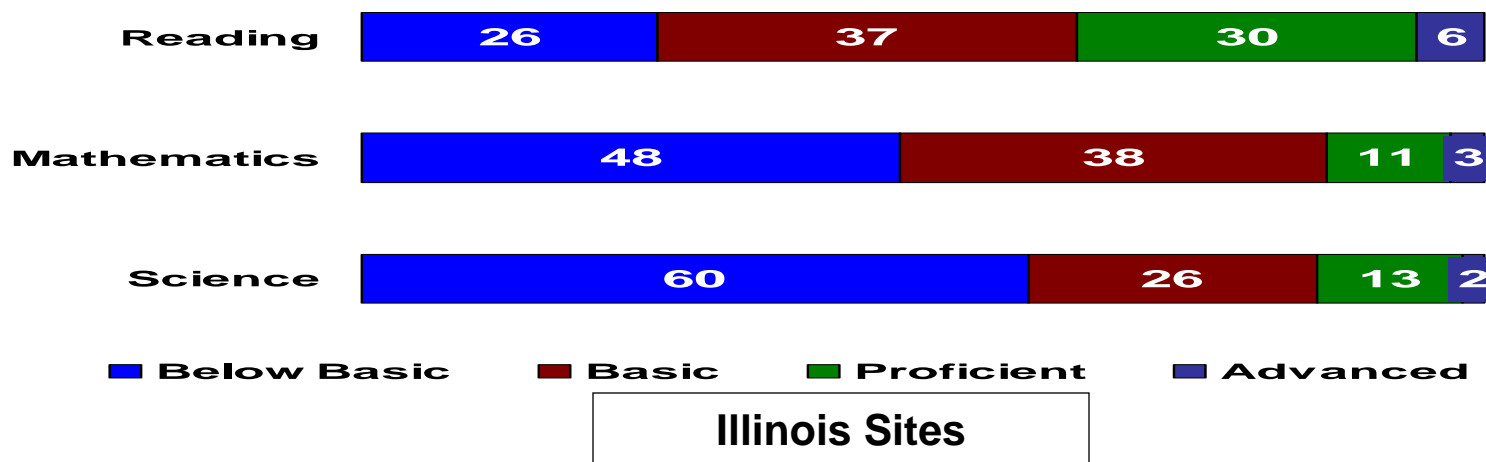
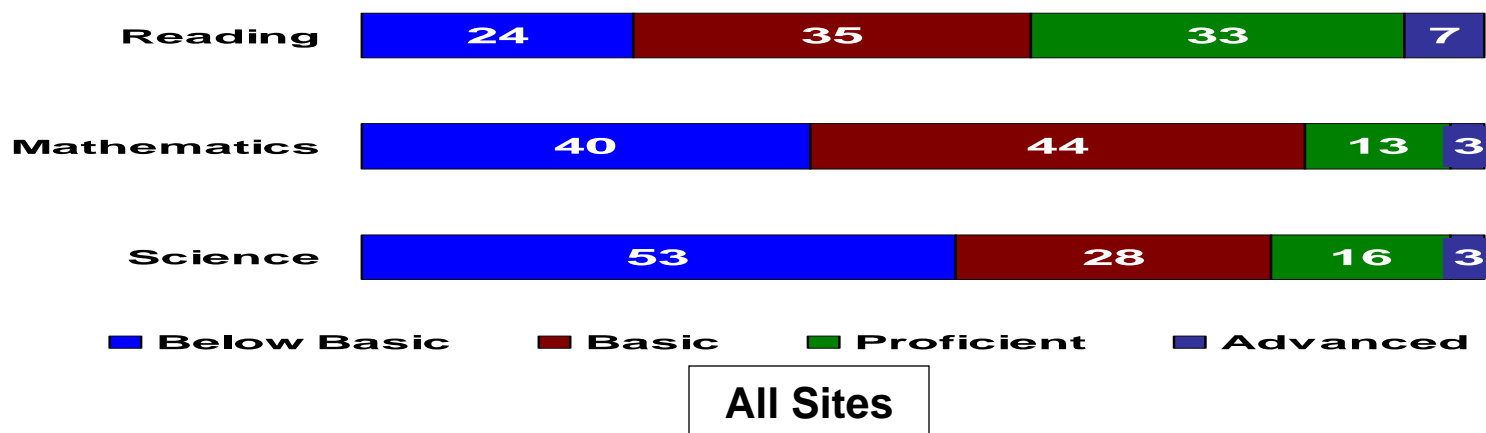
HSTW Mean Test Scores



Source: 2006 HSTW Assessment Report for All HSTW Sites

HSTW Proficiency Levels – All Sites and IL Sites

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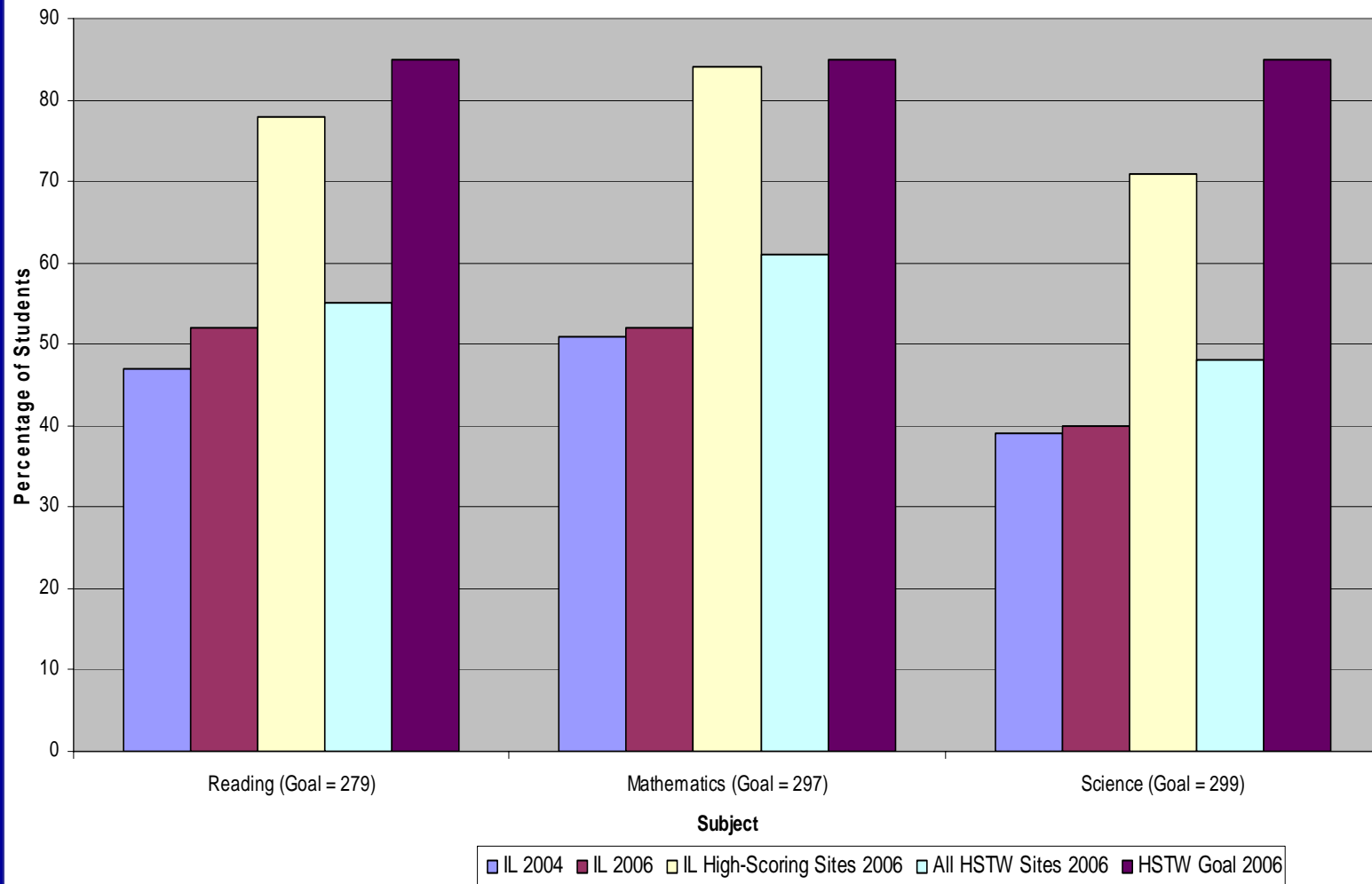
Source: 2006 HSTW Assessment Report for All HSTW Sites and SC Sites

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Meeting HSTW Performance Goals



Source: 2006 HSTW Assessment Report for All HSTW Sites

IL Reading Mean Scores: Gender and Ethnic Groups

	% of Population	Mean Reading Score (Goal 279)	% Meeting Performance Goal
All Students n=1,318	100%	277	52%
CT Students n=815	62	275	49
Male	44	274	51
Female	56	280	52
White	31	292	74
African-American	38	268	36
Latino, Hispanic	25	275	49
Other Minority	2	273	48
Multiracial	3	270	41

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IL Mathematics Mean Scores: Gender and Ethnic Groups

	% of Population	Mean Math Score (Goal 297)	% Meeting Performance Goal
All Students n=1,318	100%	295	52%
CT Students n=815	62	291	47
Male	44	294	51
Female	56	295	45
White	31	314	77
African-American	38	282	36
Latino, Hispanic	25	291	47
Other	2	300	61
Multiracial	3	290	41

IL Science Mean Scores: Gender and Ethnic Groups

	% of Population	Mean Science Score (Goal 299)	% Meeting Performance Goal
All Students n=1,318	100%	284	40%
CT Students n=815	62	281	36%
Male	44	284	45
Female	56	283	36
White	31	308	70
African-American	38	268	20
Latino, Hispanic	25	281	35
Other	2	286	42
Multiracial	3	269	37

Activity

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- Using your school's data, complete tables under "Topic Three: Painting a Picture of Student Learning" in your participant guide.
- Using your results, answer the questions in Handout 1.

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Establishing a Need for Change

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Key Practice: **Continuous Improvement**

Use student achievement and program evaluation data to continuously improve school culture, organization, management, curriculum and instruction to advance student learning.

Focusing on the Continuous Improvement Cycle

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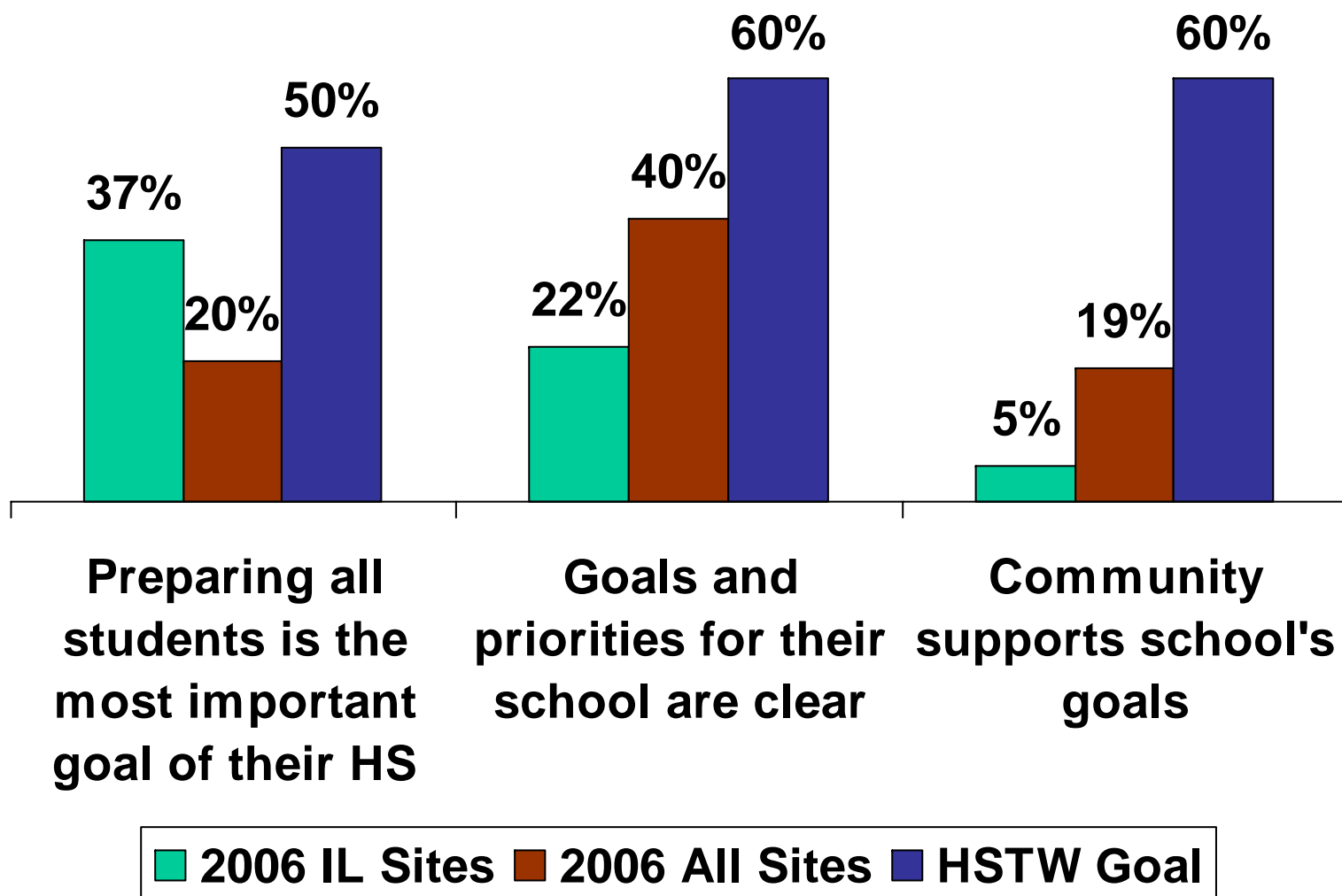
- Establish a consensus about the need to change (**assess**)
- Set interim targets to close the gap between current and desired practices (**plan**)
- Engage and support faculty to reach the targets (**do**)
- Assess progress in terms of targeted goals (**evaluate**)
- Celebrate successes frequently
- Repeat the cycle

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Setting a Clear Mission and Vision for Success



Source: 2006 *HSTW* Assessment Teacher Survey Report for Illinois and All *HSTW* Sites

To Begin the Focus and Sustain Efforts Teams Are a MUST

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Five Focus Teams (included in overall school improvement team):

- 1. Curriculum leadership team**
- 2. Professional development leadership team**
- 3. Guidance and public information leadership team**
- 4. Transitions leadership team**
- 5. Evaluation leadership team**

Activity

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- Using your school's data, complete tables under "Topic Four: Establishing a Need for Change" in your participant guide.
- Using your results, answer the questions in Handout 2.

Review

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- Does your school have active focus teams?
- What is working?
- What is not working?

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Getting Students to Take a Rigorous Curriculum

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Key Practice: **Program of Study**

Have students complete a challenging program of study with an upgraded academic core and a concentration.

***HSTW* Recommended Curriculum**

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- **Four credits in college-prep/honors English**
 - Students read 8-10 books a year
 - Students write weekly
 - Students complete at least one major research paper
- **Four mathematics credits – Algebra I, geometry, Algebra II and above**
- **Three lab-based science credits at the college-prep level; four credits with a block schedule**
- **Three credits of social studies; four credits with a block schedule**
- **Mathematics and Science in the Senior Year**

Recommended Concentrations

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- **Mathematics and science concentration** – four credits in each field, with at least one at the Advanced Placement level
- **Humanities concentration** – four credits each in college-prep level language arts and social studies, with at least one at the college level and four additional credits from foreign language, fine arts, journalism, debate, music, etc.
- **Career/technical concentration** – four credits in a planned sequence of courses within a broad career field – pre-engineering, health/medical science, construction, etc.

HSTW-Recommended Curriculum and Academic Achievement

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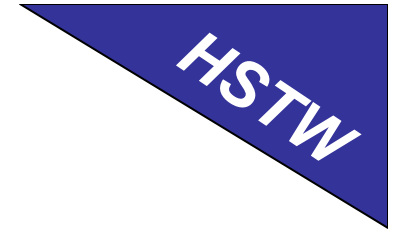
	%	Mean Reading Score	Mean Math Score	Mean Science Score
Fully Completed (all 3 subjects)	25	291	317	310
Partially Completed (1 or 2 subjects)	50	279	301	294
Did Not Complete (0 subjects)	25	264	283	276
<i>HSTW</i> Goal	85	279	297	299

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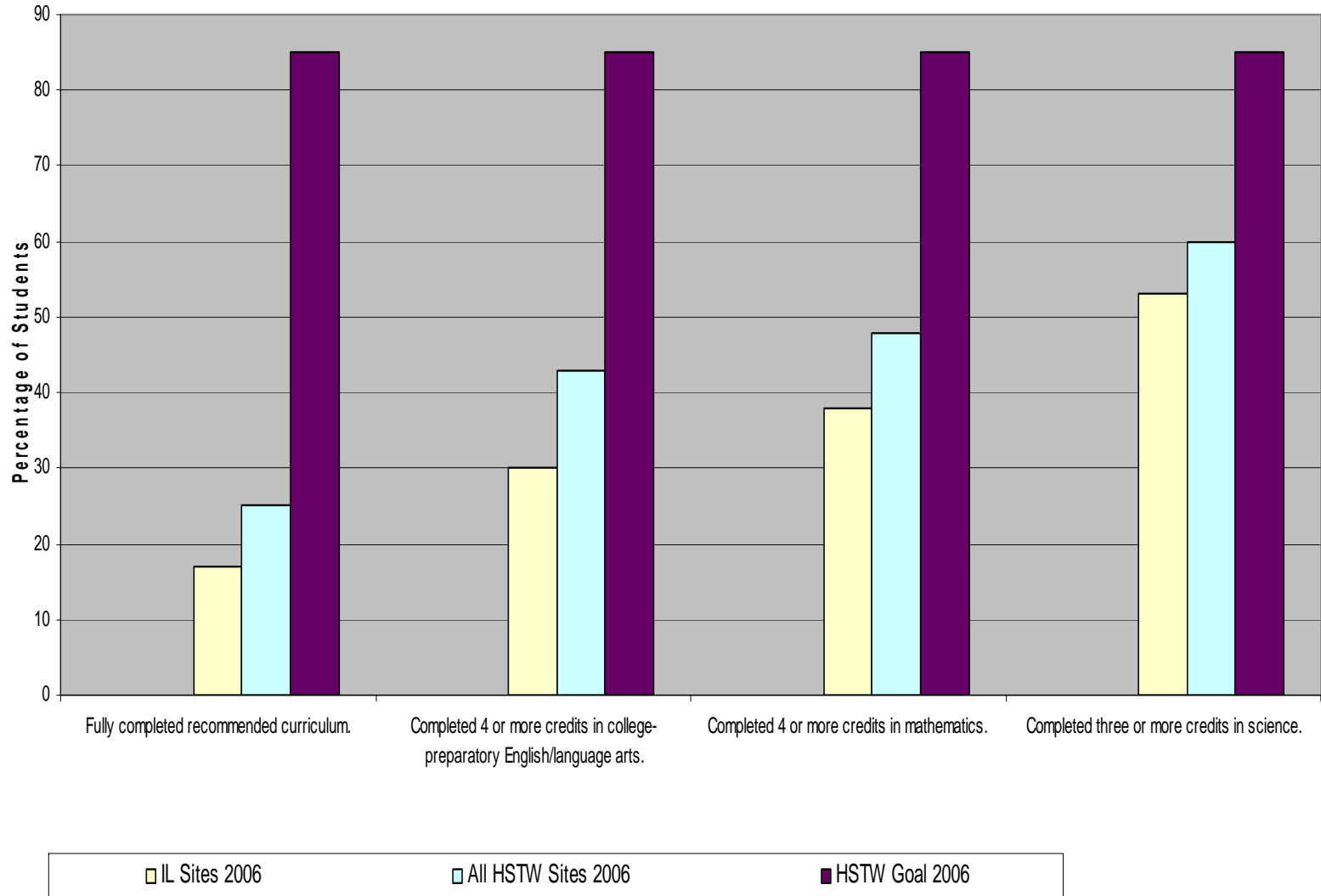
Source: 2006 *HSTW* Assessment Report for All Sites – Based on students who completed the student survey and all three subject tests.

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Student Completion of *HSTW* Recommended Curriculum



Which Actions Can you Take to Get Students to Take the Right Courses?

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- **Enroll ALL students in the Core**
- **Eliminate 15-20 percent of low-level courses/sections annually to enroll more students in higher level courses**
- **Investigate alternative schedules to allow more time for students to take critical courses**
- **Use the core as the default curriculum**
- **Get guidance staff on board**

Which Actions Can you Take to Get Students to Take the Right Courses?

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- **Raise graduation requirements**
- **Strengthen guidance and advisement - involve parents**
- **Develop student handbook with career pathways and related course of study**
- **Eliminate smorgasbord scheduling**
- **Use guest speakers, hold career expos and college fairs**
- **Establish small learning communities**

Standards-Based Reform

- The quality and intensity of the high school curriculum are powerful predictors of success in college
- Preparedness for postsecondary education depends on
 - specific courses taken
 - rigor of the curriculum
 - quality of the instruction
 - effort of the student



Activity

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- Using your school's data, complete tables under "Topic Five: Getting Students to Take a Rigorous Curriculum" in your participant guide.
- Using your results, answer the questions in Handout 3.

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High Expectations and Extra Help

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HSTW Key Practices:

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Motivate more students to meet **high expectations** by integrating high expectations into classroom practices and giving students frequent feedback.

Provide a structured system of **extra help** to enable students to meet higher standards.

Agreeing on A-, B- and C-level Work – Suggested Strategies

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- **Use basic, proficient and advanced NAEP National Readiness Standards**
- **Use select universities, regional universities, community college and high school graduation**
- **Use procedural/comprehension, application/analysis, and synthesis/evaluation Intellectual (Webb/Bloom)**

Emphasize College Readiness Requirements

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- **SAT scores**
 - 500 or higher= ready for college level work
 - Below 450 = remediation
 - Select universities (1100 score for acceptance)
- **ACT College-readiness Benchmarks:**
 - English 18
 - Reading 21
 - Mathematics 22
 - Science 24

Actions for Defining the Amount and Quality of Work Expected

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- **Benchmark assignments and assessment to proficient level/grade level**
- **Develop common course syllabi, rubrics and end-of-course exams**
- **A, B, C, Not-yet grading scale**

High Expectations

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- Teachers clearly indicate the amount and quality of work that are necessary to earn a grade of “A” or “B” at the beginning of a project or unit **often**.
- Teachers are **frequently** available before, during or after school to help them with their studies.
- Usually spend **one or more hours** on homework each day.
- Revise essays or other written work several times to improve quality **often**.
- Work hard to meet high standards on assignments **often**.

Sticking to Expectations— Actions for Revising Work

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- **Three-week assessment**
- **Requiring extra help for those not meeting standards**
- **Teachers do not let students get by without doing work**

Extra Help

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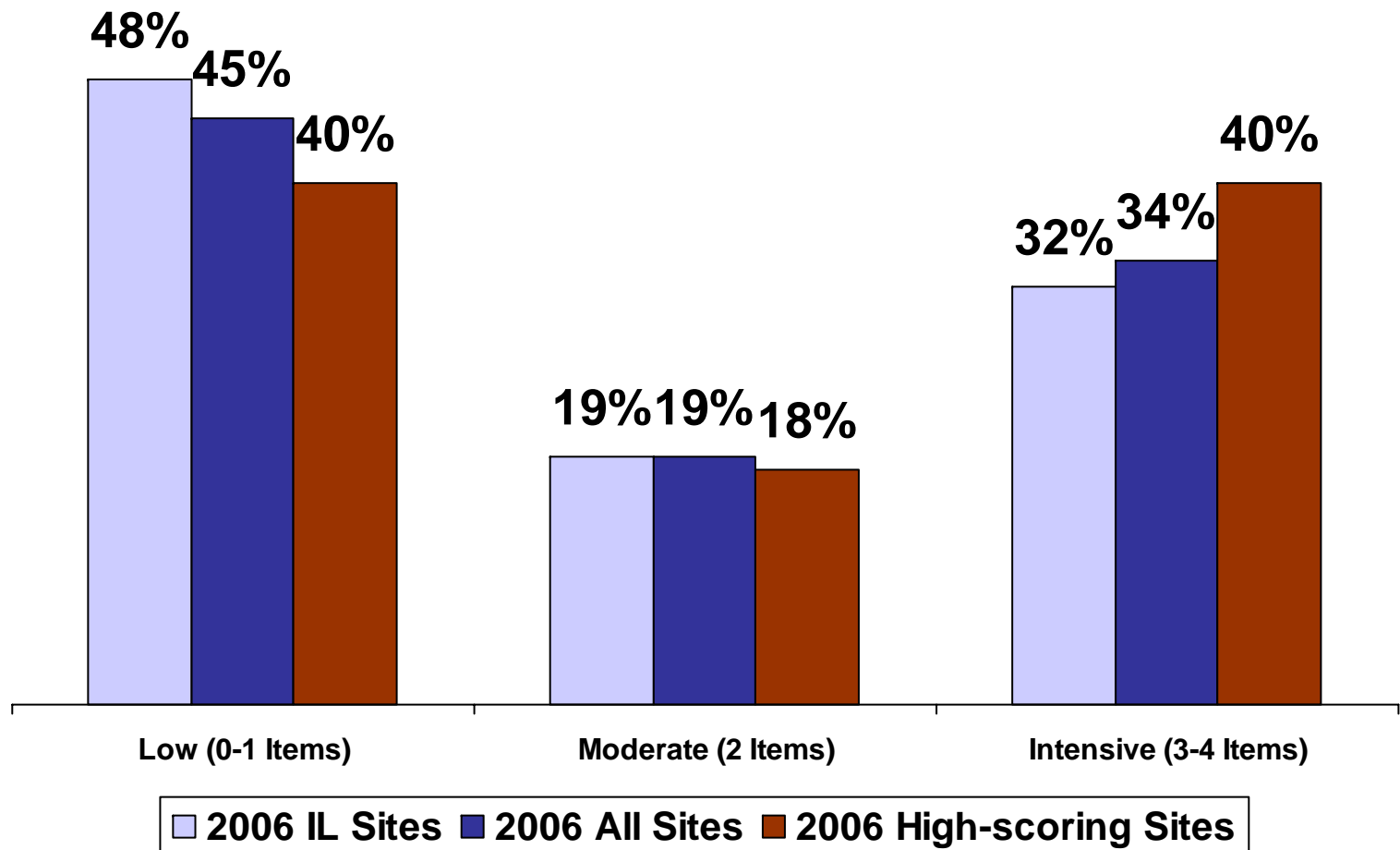
- **Often** able to get extra help from teachers when needed without difficulty.
- Teachers are **frequently** available before, during or after school to help them with their studies.
- Extra help received **often** helps them to understand their schoolwork better.
- Extra help received **often** helps them get better grades.

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Extra Help

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Source: 2006 *HSTW* Assessment Report for All *HSTW* Sites

A Comprehensive Extra Help Program Must Include:

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- **Continuous extra help to meet standards**
- **Middle grades actions**
- **Ninth-grade transition**
- **High school, postsecondary and careers transitions**
- **Develop independent learners**

Activity

SREB

- Using your school's data, complete tables under "Topic Six: High Expectations and Extra Help" in your participant guide.
- Using your results, answer the questions in Handout 4.

Review

SREB

- What actions can be taken to increase the expectations of students and the numbers of students receiving quality extra help?

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Quality Career/technical Studies and Work-based Learning

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HSTW C/T Key Practices:

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Provide more students access to intellectually challenging **career/technical studies** in high-demand fields that emphasize the higher-level mathematics, science, literacy and problem-solving skills needed in the workplace and in further education.

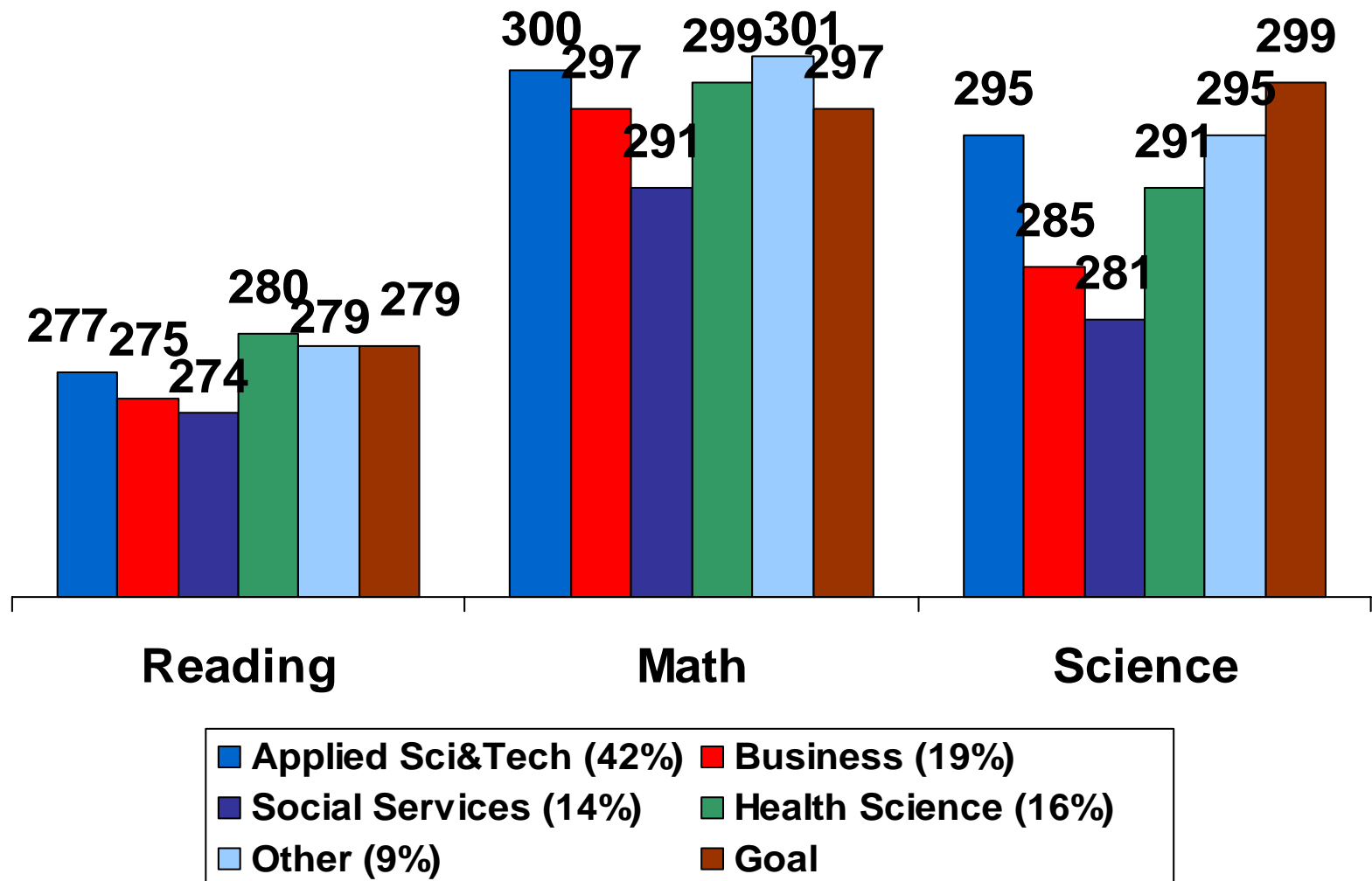
Enable students and their parents to choose from programs that integrate challenging high schools studies and **work-based learning** and are planned by educators, employers and students.

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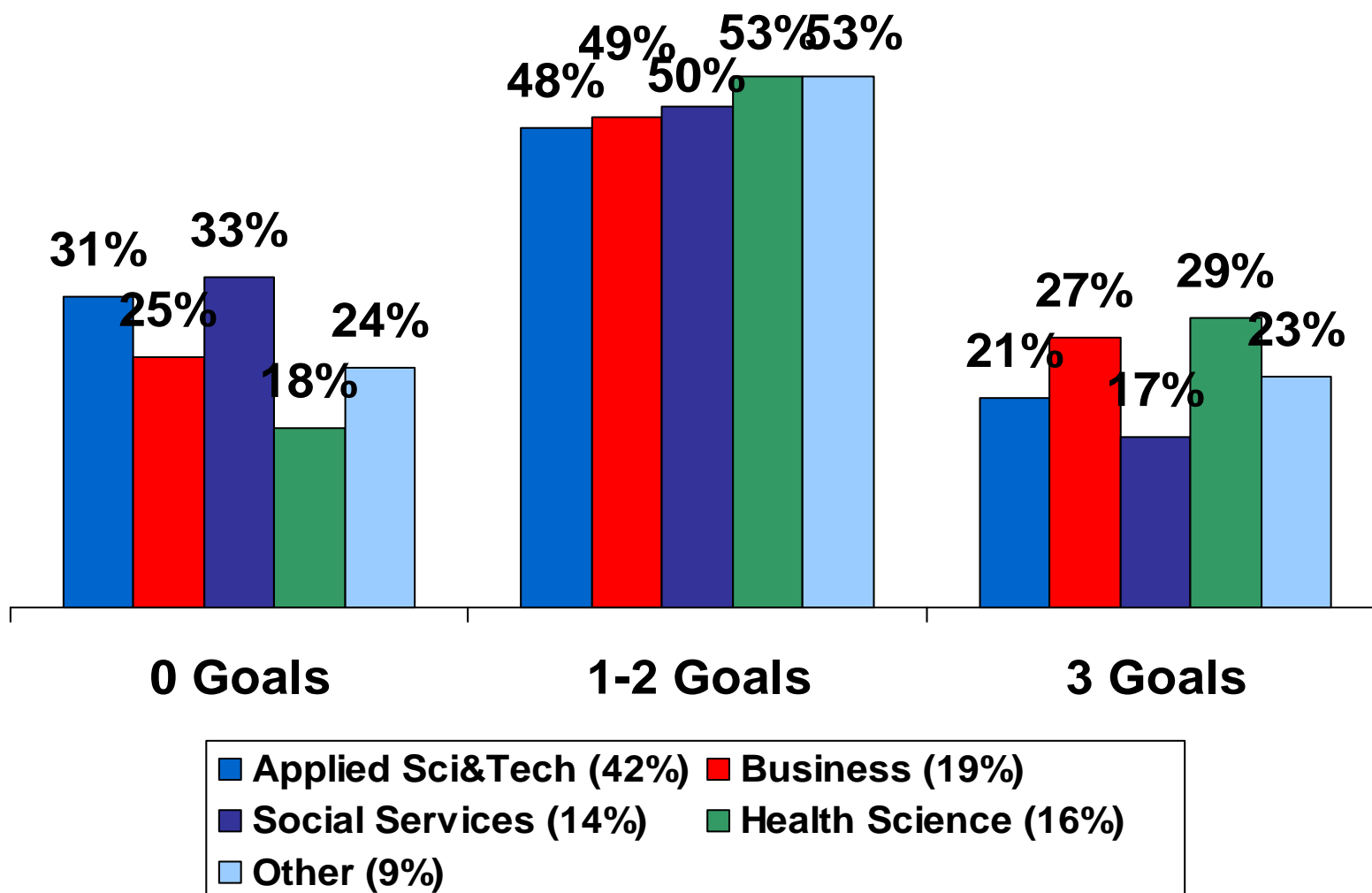
Mean Scores by Broad C/T Field



Source: 2006 HSTW Assessment Report for All HSTW Sites

Curriculum Goals by Broad C/T Field

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Source: 2006 HSTW Assessment Report for All HSTW Sites

Quality C/T Studies

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- Spent **one or more hours** reading non-school materials outside of class in a typical week.
- Used math to complete challenging assignments in C/T area **at least weekly**.
- Read and interpret technical books/manuals in CT **at least monthly**.
- Read a career-related article and demonstrated understanding **at least monthly**.
- Used computer skills to do assignments in CT **at least monthly**.
- Had challenging assignments in CT **at least monthly**.
- Completed a project requiring research and plan.
- Had to meet standards on a written exam to pass CT course.
- Required to complete a senior project.
- Spoke or visited with someone in a career to which they aspire.
- Spent **30 minutes or more** on CT homework each day.

Integration Indicators for Higher Achievement

SREB

- Students believe their teachers work together.
- Mathematics and science teachers use real-world problems.
- Career/technical teachers require students to read, write and use mathematics.
- Students complete a senior project.
- Students receive work-site instruction on communications and mathematics.

Conditions for Supporting Integration

SREB

- Common planning time
- Standards-based, not activity-based
- Create organizational structure that will support teacher collaboration
- Provide large blocks of instructional time for completion of complex tasks
- Provide professional development to support teachers
- Establish clear expectations for teachers—
Collaboration by invitation does not work

Quality Work-based Learning

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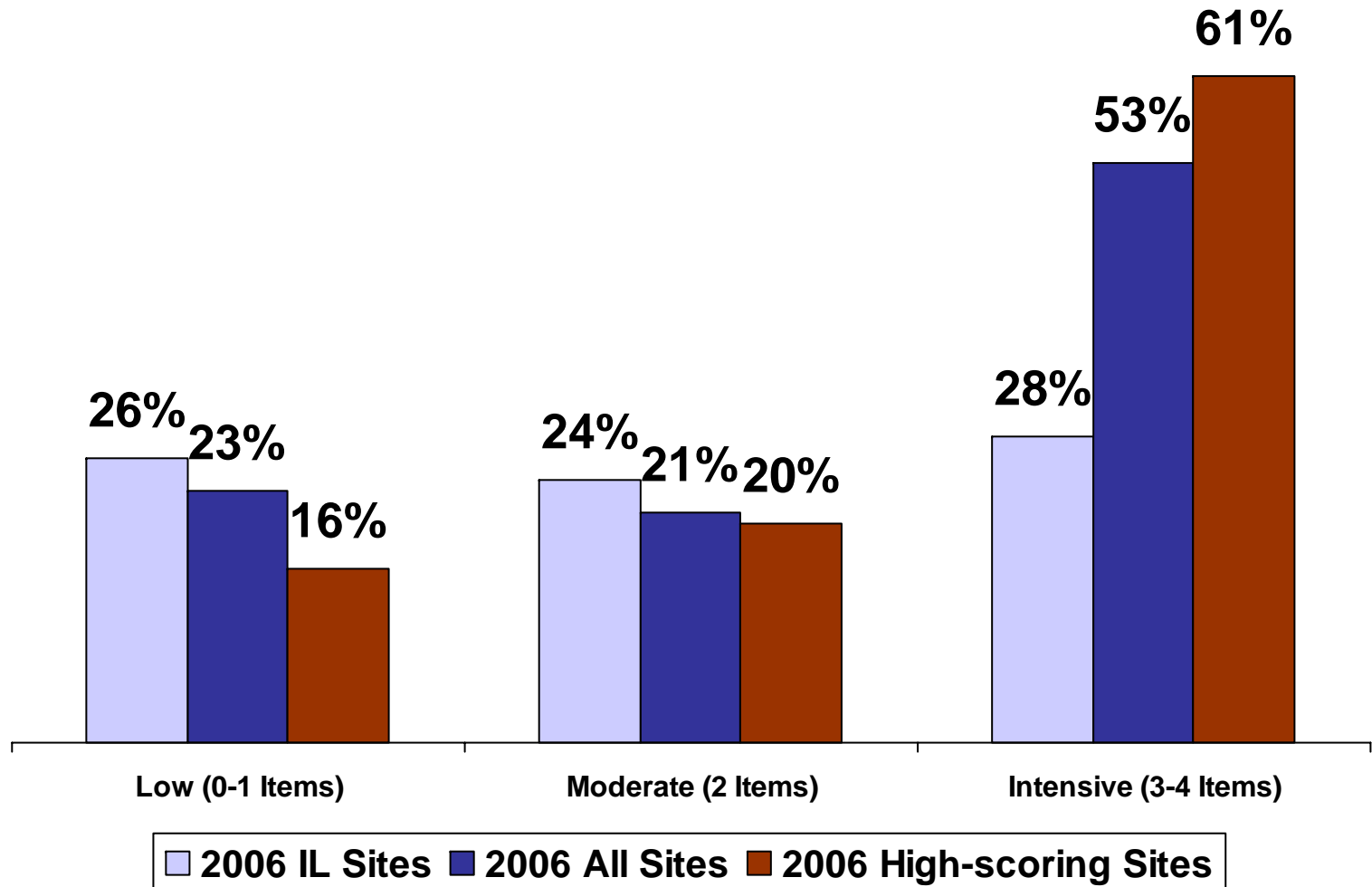
- Observed veteran workers perform certain jobs.
- Had someone teach them how to do the work.
- Employers encouraged them to develop good work habits **at least monthly**.
- Employers encouraged them to develop good customer relations skills **at least monthly**.

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Quality Work-based Learning



Source: 2006 *HSTW* Assessment Report for All *HSTW* Sites

Activity

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- Using your school's data, complete tables under "Topic Seven: Quality C/T Studies and Work-based Learning" in your participant guide.
- Using your results, answer the questions in Handout 5.

Review

SREB

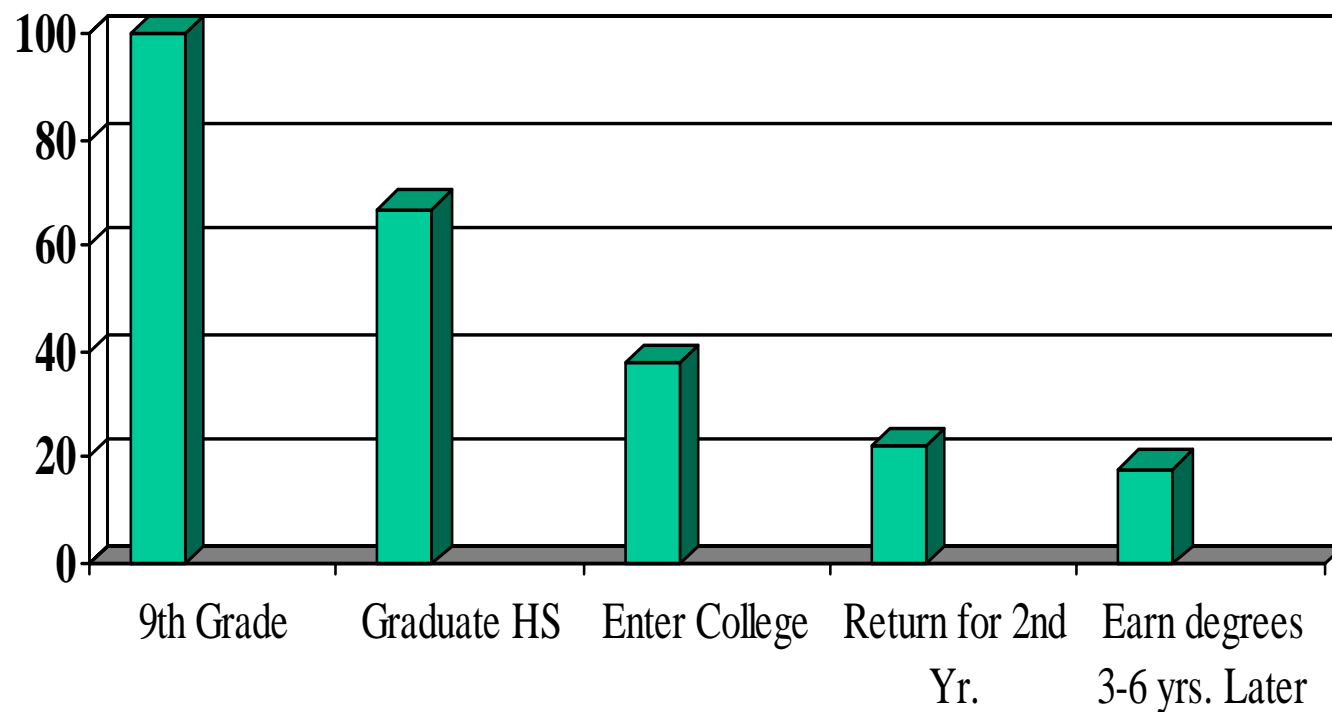
- What actions can be taken to increase the quality of C/T studies and work-based learning?

Day 1 Review:

- List possible actions steps identified by your team on day 1 (use flip chart paper)

The Education Pipeline

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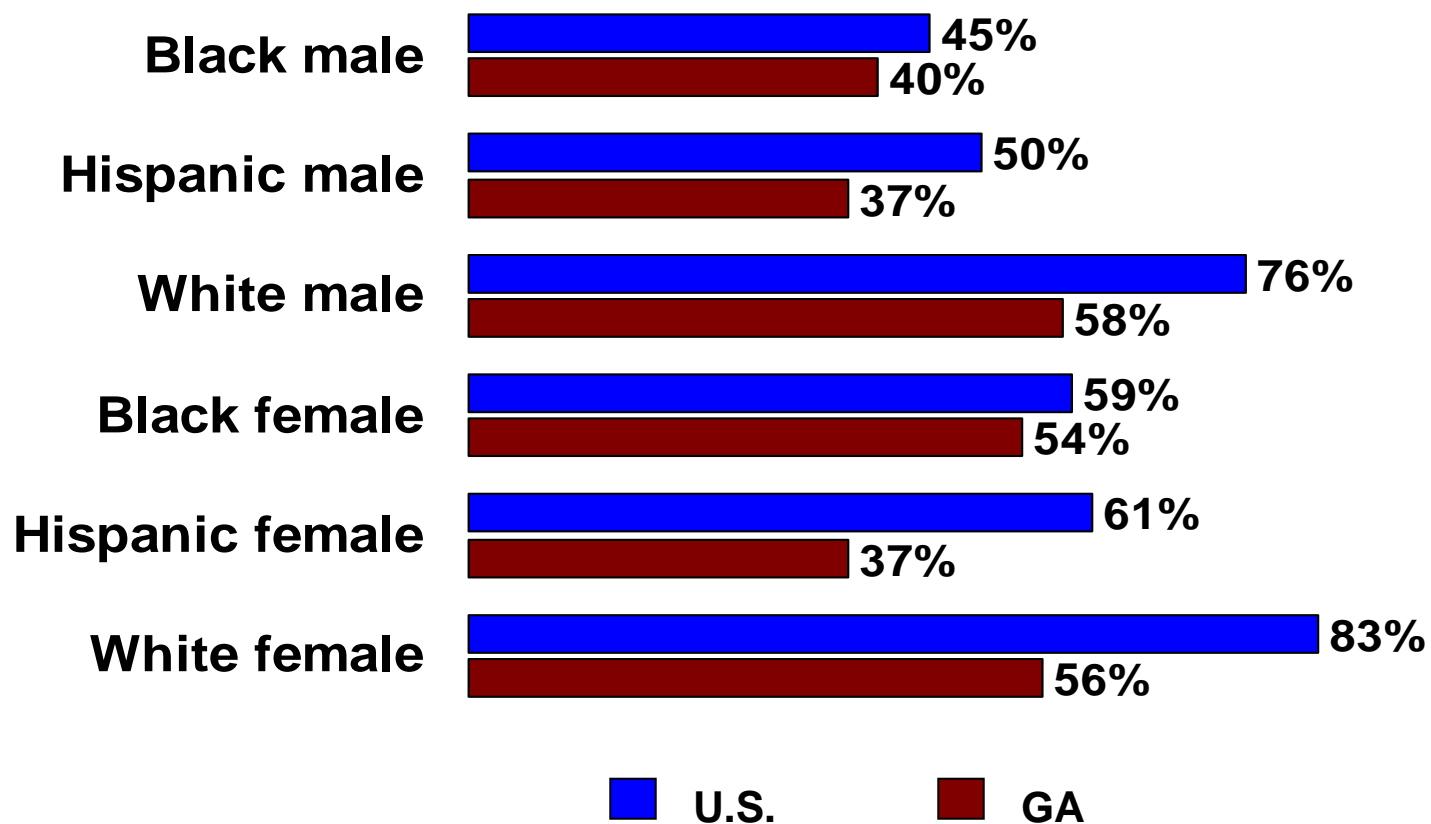
Source: The Bridge Project Stanford University

What Groups Are We Failing?

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Graduation Rates by Race and Gender (2003)



Source: Urban Institute

Percent of Students Who Take Remedial Courses

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- **63% at two-year institutions**
- **40% at four-year institutions**

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Source: The Bridge Project Stanford University

More Graduation Statistics

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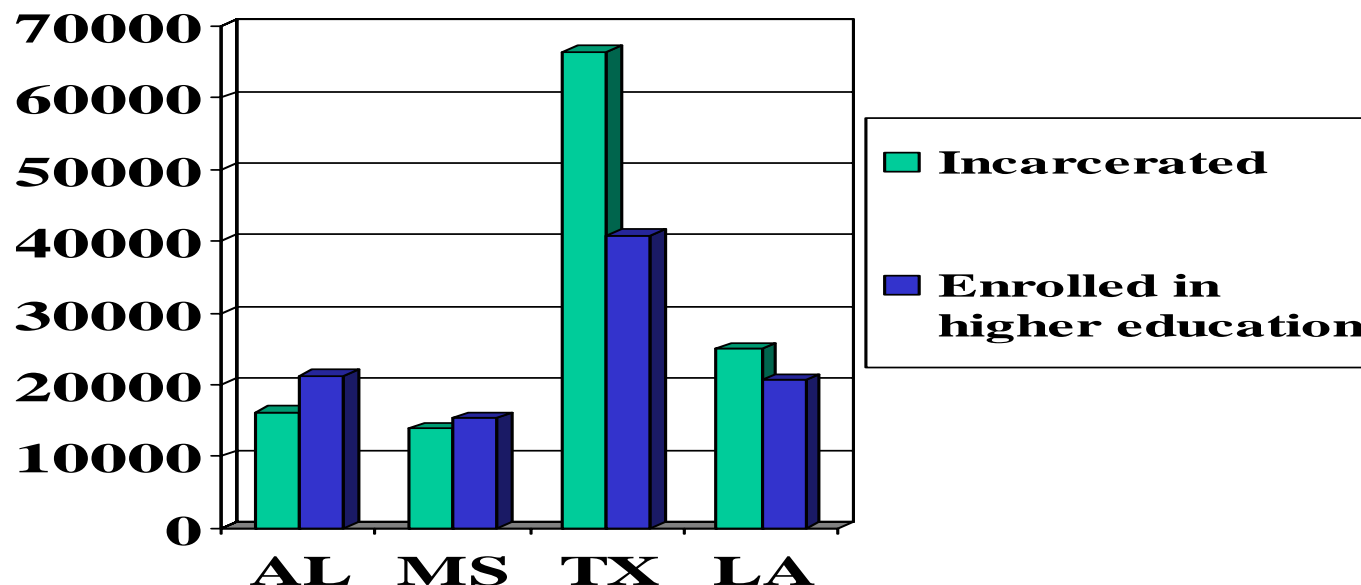
- In the 35 largest American cities, fewer than 50% of 9th graders complete high school.
- 30% of college freshmen do not make it to their sophomore year, and less than 50% receive a diploma.
- An African American male born today is twice as likely to go to prison as college

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Source: National High School Alliance

African American Male Students

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- A multi-year study of the Current Population Survey (1996-2001) found that 16% of all male high school drop-outs (ages 18-24) were in prison, jail or on parole
- For African American male drop-outs, the chance of being in jail, prison or on parole was 3 in 10

Source: The State of the South, 2004

In Illinois...

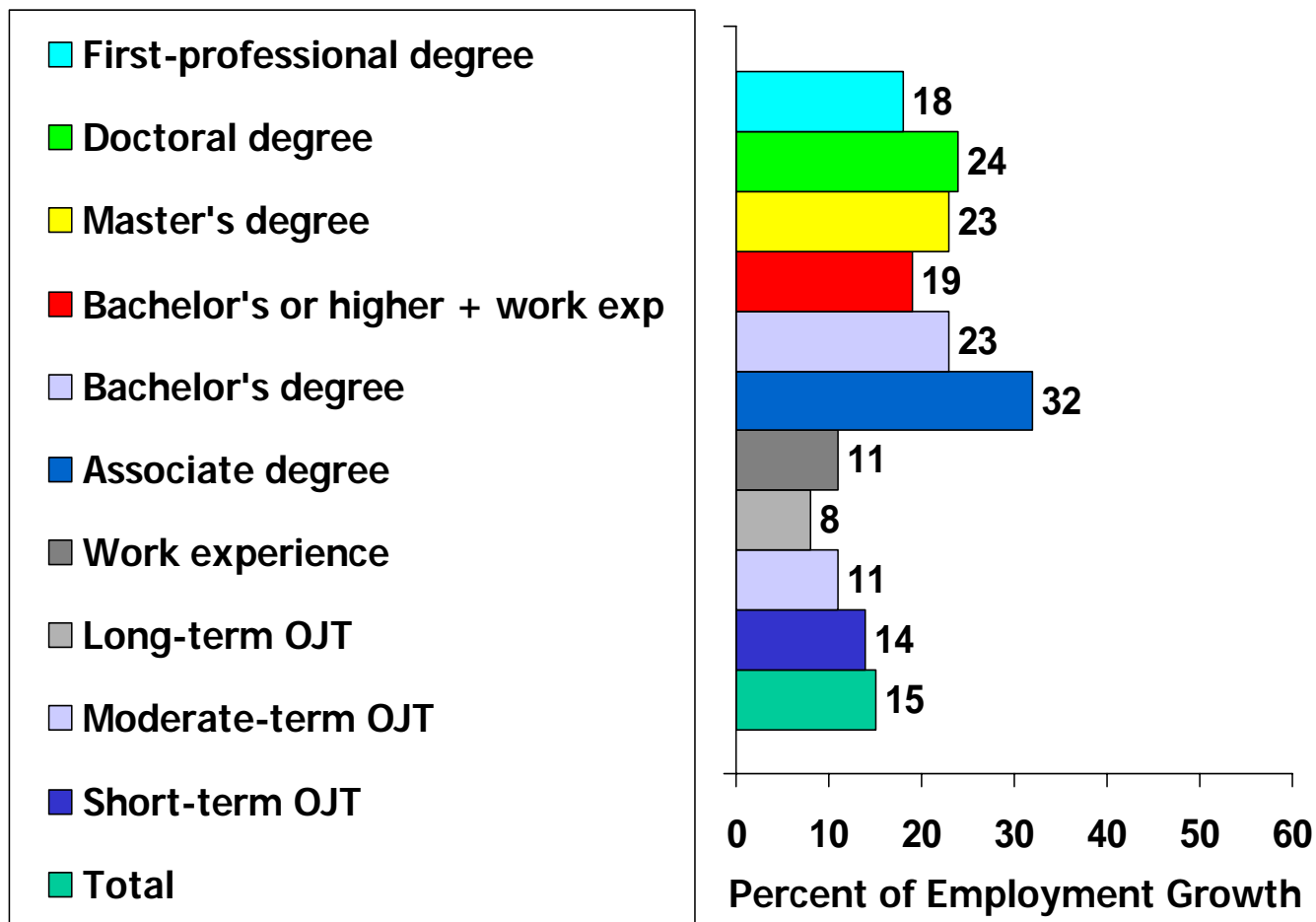
- The prison population has grown by more than 60 percent since 1990.
- Two thirds of the state's more than 44,000 prisoners are African-American.
- 1 in 5 Black Cook County (which contains Chicago and some of its suburbs) men in their 20s are either in prison or jail or on parole.
- For Cook County whites of the same gender and age, the corresponding ratio is 1 in 104.
- Illinois has 115,746 more persons enrolled in its 4-year public universities than in its prisons.
- When it comes to Blacks, however, it has 10,000 more prisoners.
- For every African-American enrolled in those universities, two and a-half Blacks are in prison or on parole in Illinois.

Source: Paul Street, Research Director, Chicago Urban League.

Fastest Growing Jobs Require Some Education Beyond High School

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Quality Instruction

HSTW Key Practices:

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- **Engage students** in academic and career/technical classrooms in rigorous and challenging assignments using research-based instructional strategies and technology.

Engaging Students in Relevant Instruction

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- Provide teams of teachers from several disciplines the time and support to work together to help students succeed in challenging academic and career/technical studies.
- Integrate reading, writing and speaking as strategies for learning in all parts of the curriculum and integrate mathematics and science in career/technical classrooms.

SREB's Literacy Goals

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- Students will read the equivalent of 25 books per year across the curriculum.
- Students will write weekly in all classes.
- Students will use reading and writing strategies to help them understand and use the content of all classes.
- Students will write investigative research papers in all classes.
- Students will be taught as if they were in honors language arts classes.

Literacy Across the Curriculum

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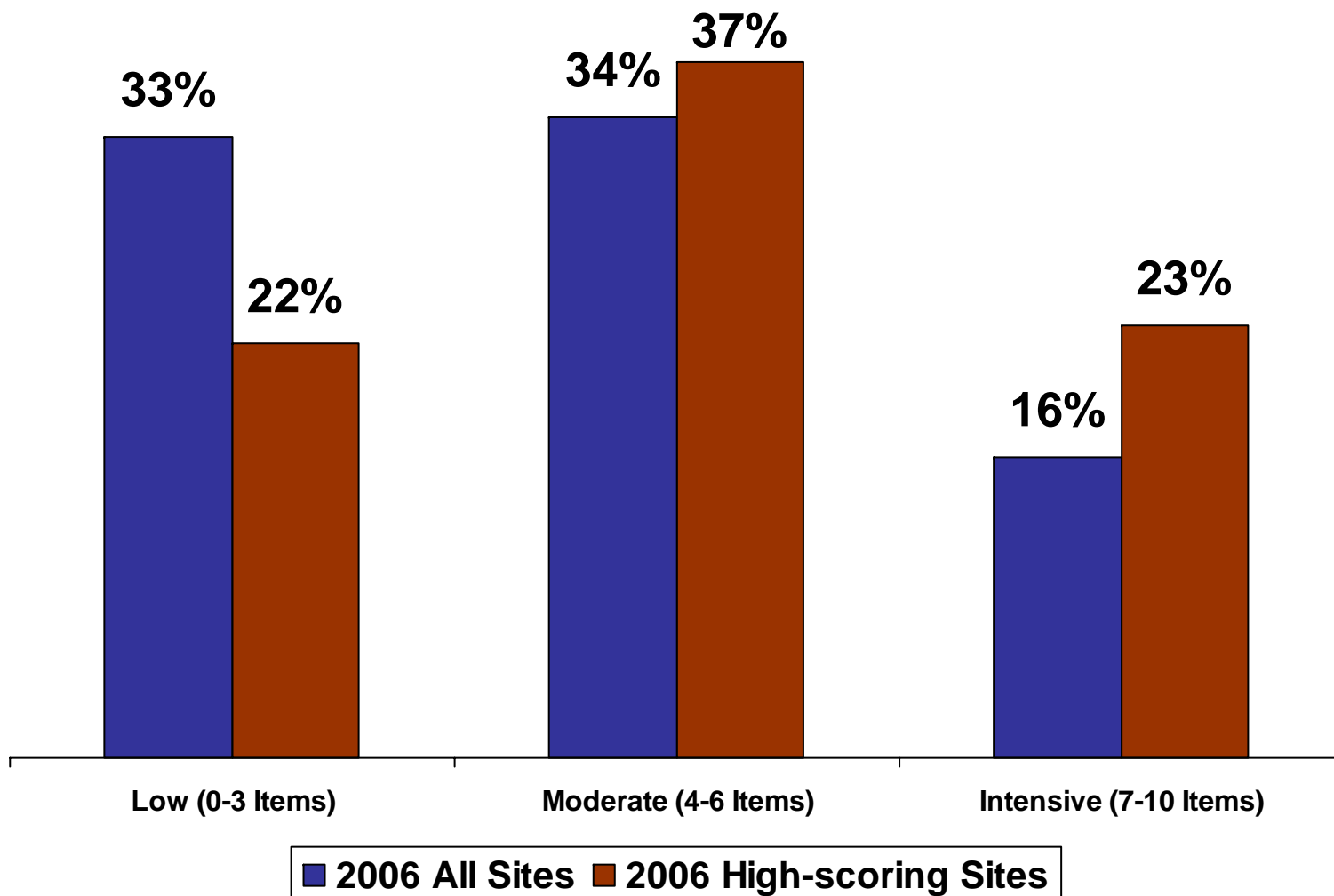
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- Use word-processing to complete assignments **often**.
- Revise written work to improve quality **often**.
- Write in-depth explanations about projects **sometimes or often**.
- Discuss or debate with others about what they read **at least monthly**.
- Read and interpret technical books **at least monthly** in CT.
- Read an assigned book outside of class and demonstrate understanding **at least monthly**.
- Read non-school materials outside of class for **two or more hours** in a week.
- Complete graded short writing assignments in English **at least monthly**.
- Complete graded short writing assignments in science **at least monthly**.
- Complete graded short writing assignments in social studies **at least monthly**.

Literacy Across the Curriculum

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Source: 2006 *HSTW* Assessment Report for All *HSTW* Sites

Standards Based Units that Address Numeracy Across the Curriculum

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- Teachers create units of study aligned to standards in all classes
- Unit plans should include the following:
 - Standard or standards addressed
 - Level of intellectual demand—move beyond recall & procedural skills to analysis and application
 - Major assignments to be given
 - Outline the major study skills addressed: literacy skills and the research-based instructional strategies

Standards Based Units that Address Numeracy Across the Curriculum

SREB

- Increase student use of math skills in all content areas—with special emphasis in science, CT courses, physical education, & athletics

For example:

- Students orally defend a process they used to solve a math problem
- Students work in groups to solve math problems

Numeracy Across the Curriculum

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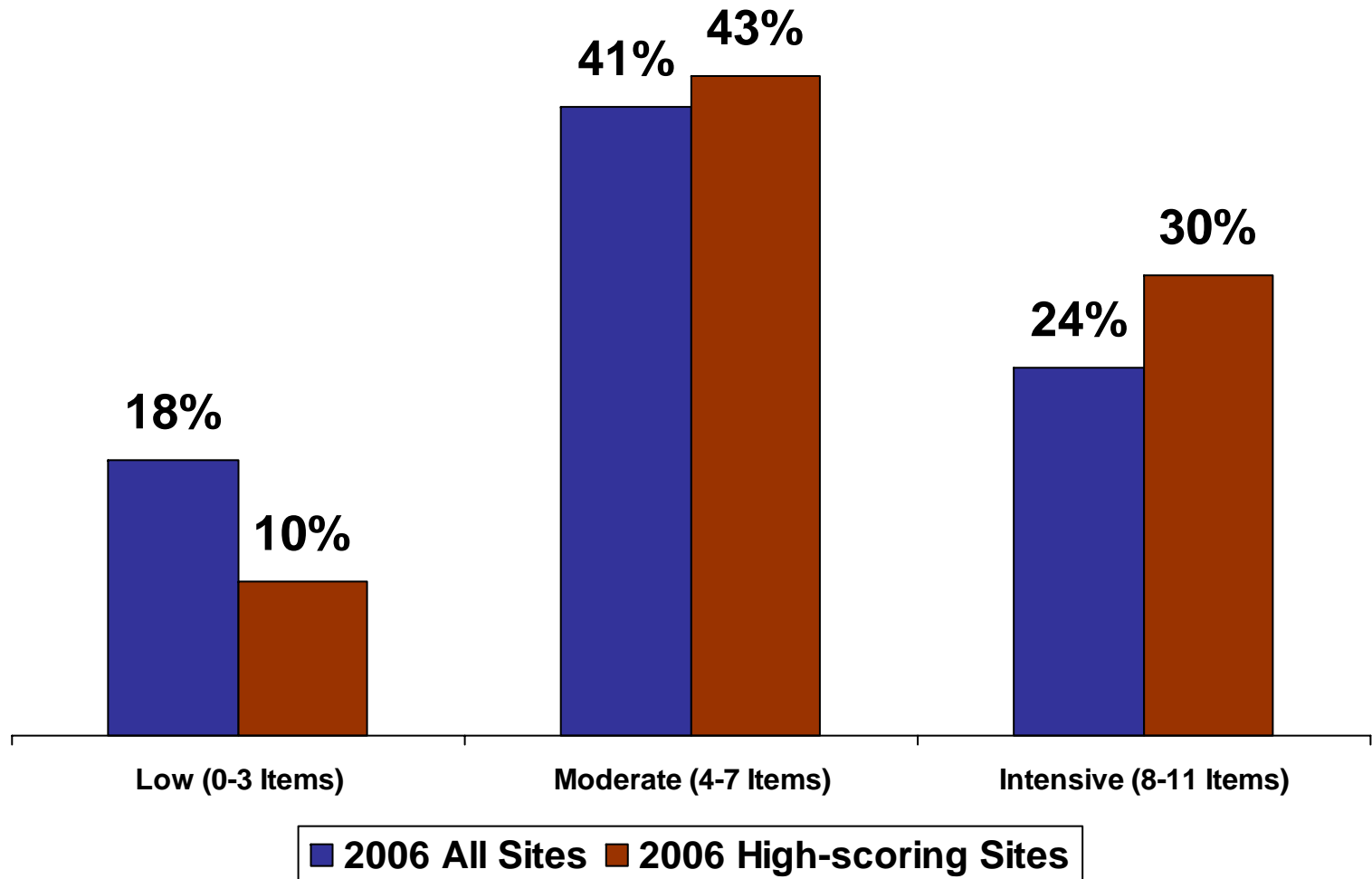
- Took a math class during the senior year.
- Took at least four math courses in grades 9-12.
- Math teachers **sometimes or often** show how math concepts are used to solve problems in real life.
- Use a graphing calculator to solve a problem **at least monthly**.
- Complete a math project **at least monthly** using math in a way that would be used in a work setting.
- Orally defend a process used to solve a problem **at least monthly**.
- Worked with other students **at least monthly** on a challenging math assignment – group and individual grade.
- Worked in groups to brainstorm how to solve a problem **at least monthly**.
- Solved math problems with more than one possible answer **at least monthly**.
- Solved non-textbook math problems **at least monthly**.
- Used math to complete CT assignments **at least monthly**.

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Numeracy Across the Curriculum



Source: 2006 *HSTW* Assessment Report for All *HSTW* Sites

Engaging Science Experiences

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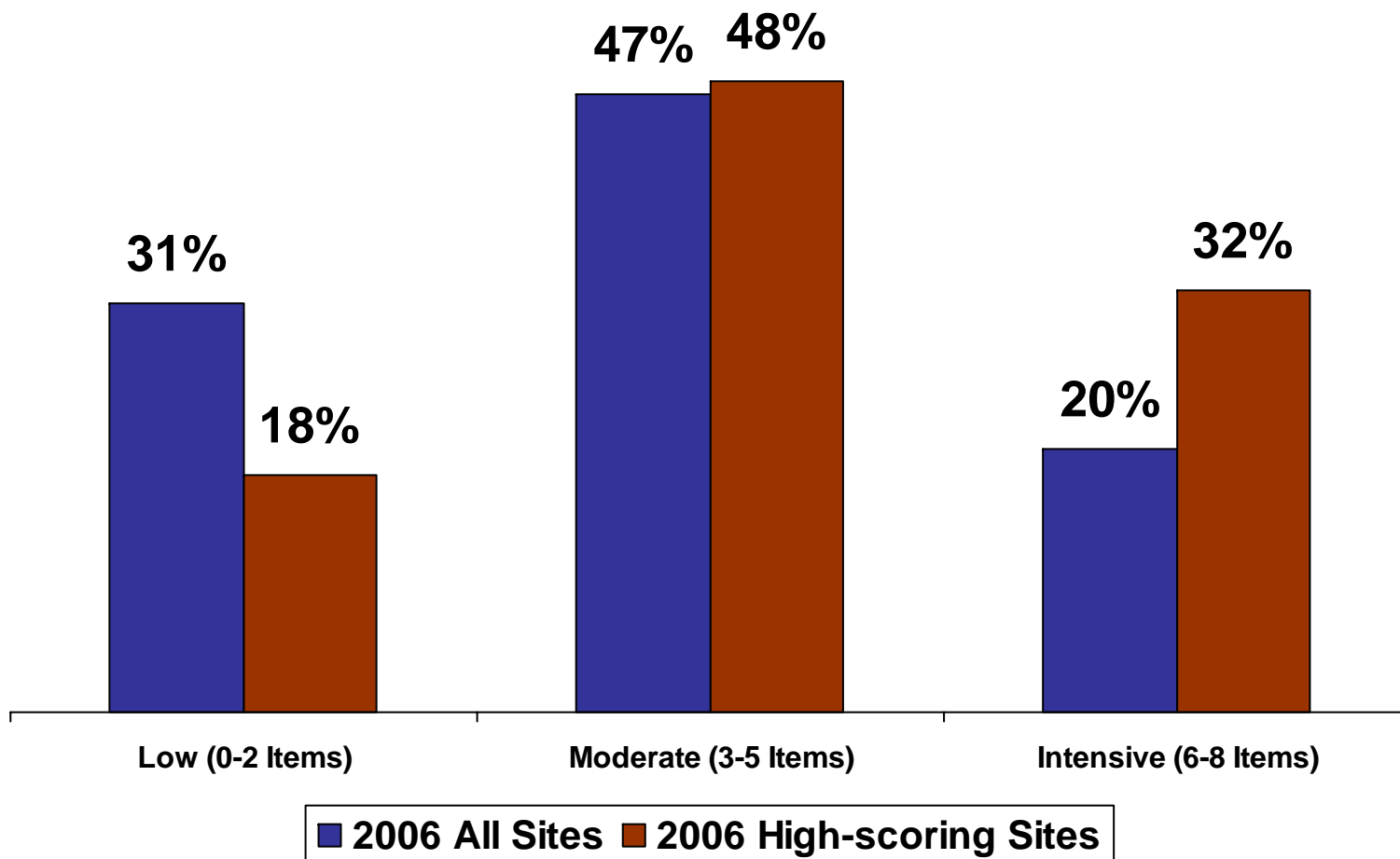
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- Completed three or more: CP physical science, CP biology/biology 2, anatomy, CP chemistry, physics or AP science
- Science teachers show them how concepts are used to solve problems in real life **often**.
- Took a science class during the senior year.
- Use science equipment to do science activities in a laboratory with tables and sinks **at least weekly**.
- Read an assigned book (other than textbook) or article dealing with science **at least monthly**.
- Use science equipment to do science activities in a classroom **at least monthly**.
- Work with other students on a challenging science assignment **at least monthly**.
- Prepare a written report of lab results in science **at least monthly**.

Engaging Science Experiences

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Source: 2006 *HSTW* Assessment Report for All *HSTW* Sites

Actions for Engaging Students in Research-Based Instructional Strategies

- Project-based learning
- Cooperative learning
- Student-designed research
- Integrated, interdisciplinary studies
- Integrating Technology
- Effective direct instruction

How will you improve the quality of instruction?

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- Peer Observations
- Demonstration Classrooms
- Marzano's *Classroom Instruction that Works*
- Kagan Strategies
- Team Teaching/Buddy Teaching
- Teacher Teams
- Student Work Review

Activity

SREB

- Using your school's data, complete the tables under "Topic Eight: Quality Instruction" in your participant guide.
- Using your results, answer the questions in Handout 6.

Review

SREB

- What actions can be taken to increase the quality of instruction?

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Supporting Students – Guidance and Transitions

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Key Practice: **Guidance and Advisement**

Involve students and parents in a guidance and advisement system designed to ensure that students complete an accelerated academic program of study and a major.

A Good Guidance and Advisement Program Includes:

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- **Assisting students in planning their high school program of study by the end of grade nine**
- **Having teachers or counselors talk with students individually about plans for careers or further study**
- **Helping students review their programs of study at least annually**
- **Providing each student with an adult mentor throughout high school**

A Good Guidance and Advisement Program Includes:

SREB

- **Providing students with opportunities to speak with persons in careers to which they aspire**
- **Providing information on college and postsecondary studies to all students and parents**
- **Assisting students and parents with the postsecondary application process**

Providing Timely Guidance

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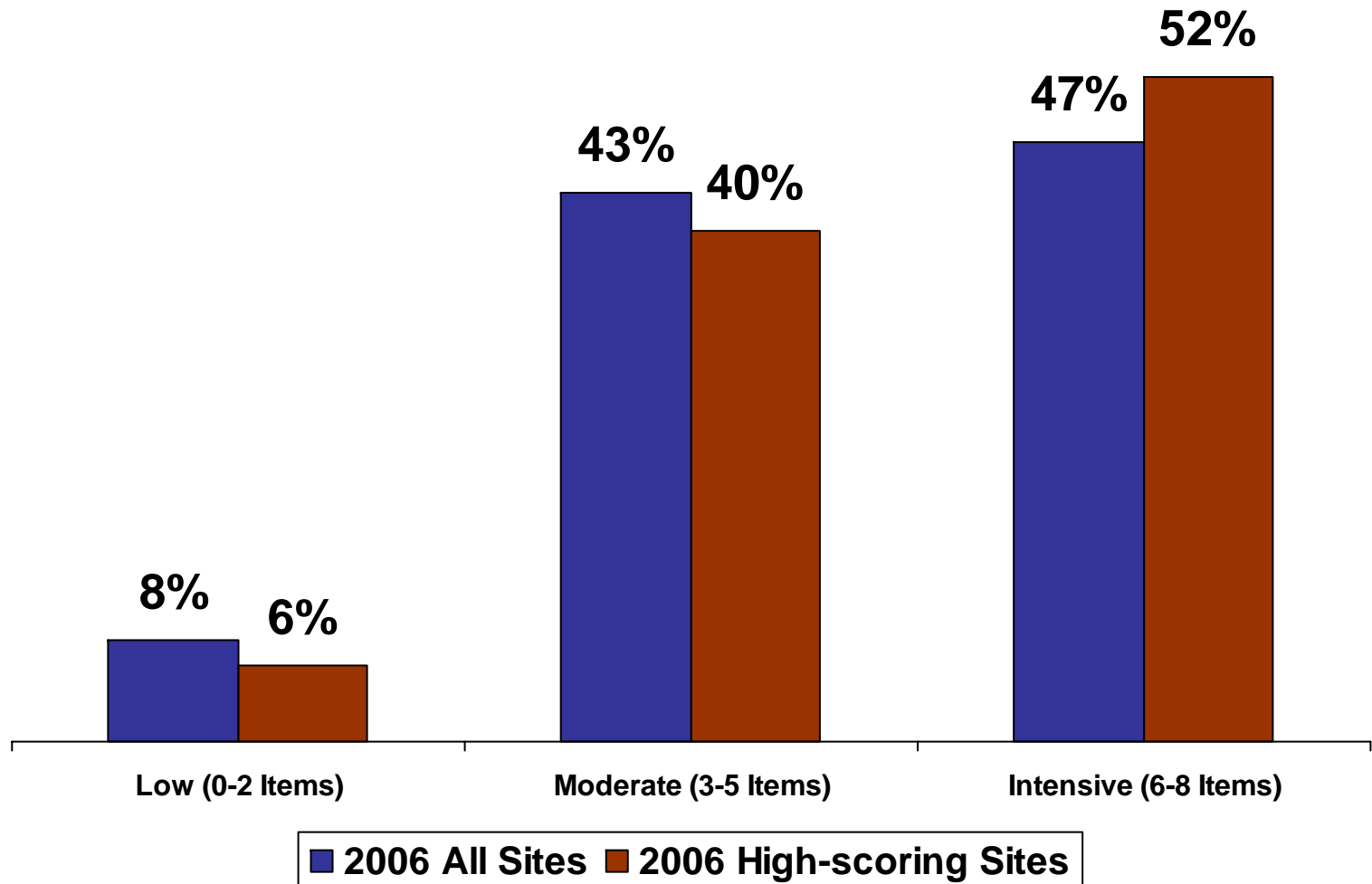
- Met with a teacher or counselor to help them review the sequence of courses they planned to take throughout high school at least once a year.
- Received the most help in planning a high school program of studies by the end of grade nine.
- Before and during high school, have talked to their parents or other adults they live with at least once a year about planning their four-year high school course plan.
- During high school, a teacher or counselor talked to them individually about plans for a career or further education after high school.
- Spoke with or visited someone in a career they aspire to.
- Someone from a college talked to them about going to college.
- Received information or assistance from someone at school about selecting or applying to college.
- Had an adult mentor or adviser work with them all four years of high school.

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Providing Timely Guidance



Source: 2006 *HSTW* Assessment Report for All *HSTW* Sites

Why target middle school transition?

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- The transition point from middle school to high school has the highest percentages of dropouts nation wide.
- The highest failure rate occurs in grade nine.
- Preparing students for high school work, directly impacts retention.

How can school leaders make sure that students are ready for rigorous high school studies?

SREB

District, high school and middle school leaders can:

- Establish readiness indicators for challenging high school English, mathematics and science courses;
- Align curriculums, teacher assignments and assessments to the readiness indicators; and
- Set goals to annually increase the percentages of students having successfully completed Algebra I by the end of grade eight.

Actions for Transition from Middle Grades to High School

SREB

- **Structured extra help programs in grades 7 and 8**
- **4 to 6 week summer bridge program for students who need accelerated instruction in math, English and reading**
- **Develop courses in grades seven and eight to give extended time to read, write and do math**

Actions for Transition from Middle Grades to High School *Continued...*

SREB

- **Orient students and parents to high school expectations**
- **Reduce the ratio of students to teachers in grade nine**
- **Get a master teacher to lead a team of teachers in core academic courses in grade nine**

What makes a ninth-grade catch-up program high-quality?

SREB

- **Early identification of students**
- **A lower student-teacher ratio in grade nine**
- **Qualified teachers with depth of content knowledge teach challenging content**
- **School schedules are modified to allow students to be double-dosed – English/reading and mathematics**

What makes a ninth-grade catch-up program high-quality?

SREB

- **Standard-based Curriculum with unit planning by teachers**
- **Teachers are organized into planning teams so they can plan together**
- **Recruit the best teachers to lead the ninth-grade teams**
- **Move beyond remedial instructional**
- **Comprehensive evaluation plan**

Why target postsecondary transition?

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- Senior year not taken seriously
- Low ACT and SAT scores
- High remedial rate in English and mathematics
- Students unprepared for workforce
- National completion rate for college only 39.9%

Research Based Strategies for Postsecondary Transition

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- **Students earn college credit while in high school.**
- **Enroll unprepared students in transition mathematics and English courses.**
 - **Courses aligned to college and career readiness standards**
- **Ensure that students who do not plan to go on to further study are in a CT program.**
- **Develop extra help for students having trouble graduating.**

Additional Actions for Making the Senior Year Count

SREB

- Have community college administer placement exam during 11th grade
- ACT Test for everyone in 11th grade
- Reality check prior to the senior year with parents, adviser and counselor
- Enroll seniors in upper-level courses
- Enroll all seniors in at least three academic courses
- Consider requiring a senior project that includes a research paper, a product or service, an oral presentation and a power point

Activity

SREB

- Using your school's data, complete the tables under "Topic Nine: Supporting Students – Guidance and Transitions" in your participant guide.
- Using your results, answer the questions in Handout 7.

Review

SREB

- What does this type of data tell us about guidance opportunities in our schools?
- How can this data be used to impact student achievement?
- What actions can be taken to increase the guidance provided to students?

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Developing an Action Plan

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Next Steps: Identify and Prioritize Actions

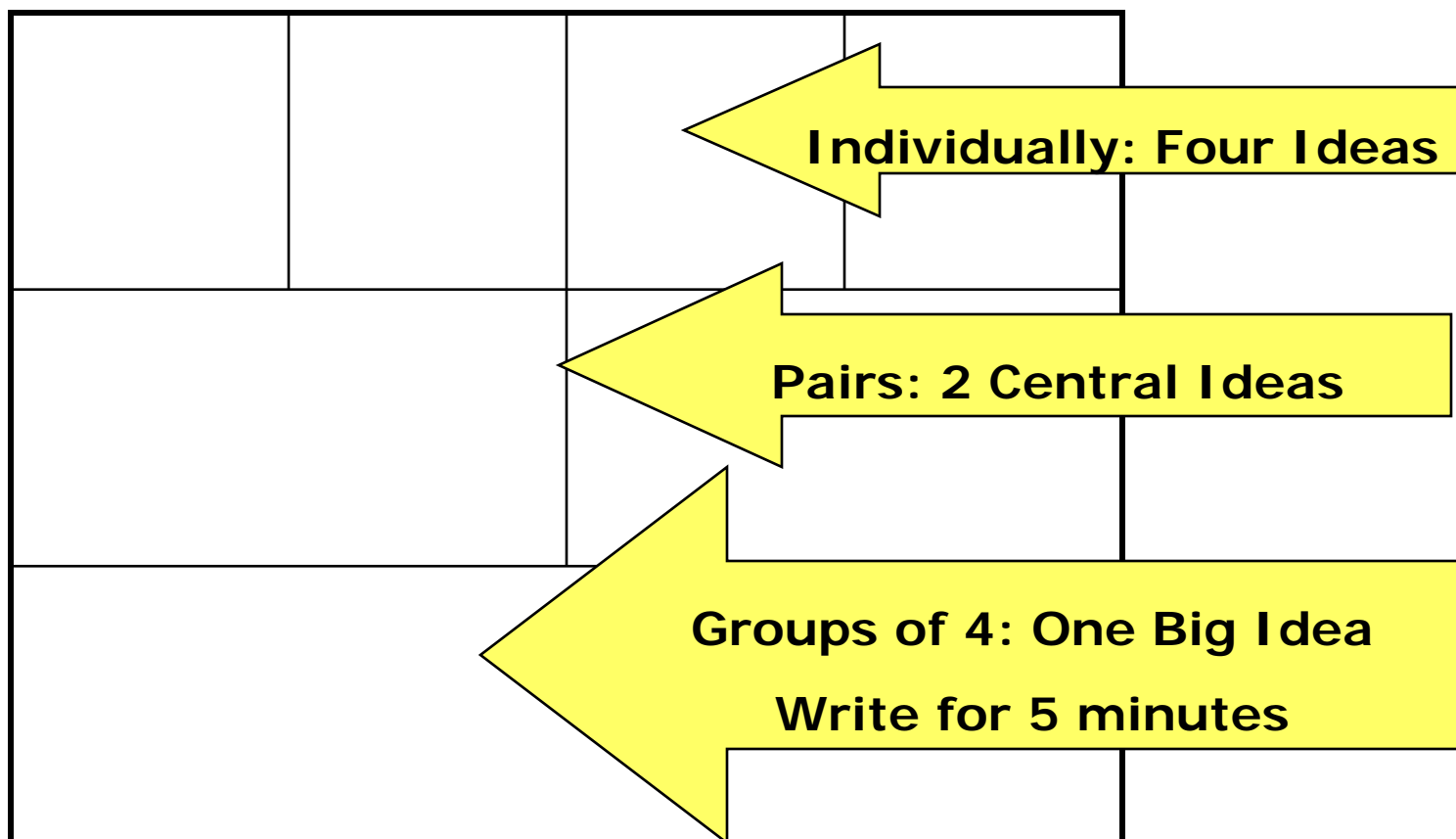
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- **List areas in need of improvement**
 - Rank items based on impact on student achievement and completion rates.
- **Identify short-term goals**
 - Implementation in the first year
 - Have one item in each of the four areas of structural, instructional, support and leadership change
- **Identify long-term goals**
 - Implementation in years two and three
 - Have one item in each of the four areas of structural, instructional, support and leadership change
- **Create a communication plan**
- **Use Pages 38-40 of Participant Guide**

4-2-1 Free Write

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Source: Silver & Strong, 2001, "Tools for Promoting Active, In-depth, Learning."

Wrapping it all up-- Remember...

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All schools want to improve but few want to change. The fact remains that to improve, one **MUST** change.

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