



SREB

High School Experiences That Influence Reading Proficiency: What States and Schools Can Do

Gene Bottoms, LingLing Han and Renee Murray

Key Findings:

- *Of the approximately 37,000 seniors from SREB states who participated in the 2006 HSTW Assessment reading test, 39 percent scored at the Proficient and Advanced levels, showing solid preparation for postsecondary studies and careers.*
- *Students who score at higher levels have specific school and classroom experiences that students scoring at lower levels do not experience to the same extent. They experience increased expectations, more rigorous course work, more access to extra help and greater emphasis on literacy across the curriculum. These comparisons hold true for demographically similar groups.*

As schools strive to advance student achievement and help students gain essential 21st-century skills, they must make reading skills the first priority for all groups of students. To succeed in academic and career/technical studies and prepare for both college and careers, students need opportunities to analyze, synthesize and evaluate information. Students who lack essential reading skills are at risk of never earning an employer certification, an associate's degree, or a bachelor's degree and beyond.

By and large, educators have failed to define reading expectations and requirements for students beyond the primary grades, when the role of reading in education shifts from *learning to read* to *reading to learn*. There is a simplistic assumption that learning to read by the end of grade four ensures students will become effective, life-long readers. Reading skills become much less of a focus as students progress through the middle grades and high school. Few leaders and teachers understand that engaging students in activities that build higher-level reading skills in all classes is also fundamental in advancing achievement in all discipline areas. Teacher preparation programs have not equipped subject-area teachers — academic and career/technical — with the knowledge and skills necessary to make reading for learning an essential component of every classroom; and principal preparation programs have not equipped administrators to lead and support their faculties in making reading a tool for learning in all classes.

This report seeks to explore the assumption that many students who read at the Proficient level experience a richer set of literacy-based learning experiences in high school than students reading at the Basic level and below. If this assumption is true, it has enormous implications for how students are taught in all classes, what they are taught, how faculty are supported to use proven literacy-based strategies and what school leaders do to create a culture in which reading and literacy strategies become a basis of learning in all classes. To address this assumption, this report uses information from the 2006 *HSTW* Assessment to answer two research questions:

- How well do seniors in *HSTW* schools within the SREB states read?
- Do the learning experiences of students who read at higher proficiency levels differ from those of students reading at the Basic level or below?

The answers to these questions should inform school and instructional practices so student achievement improves not only in reading, but in all content areas.

Southern
Regional
Education
Board

592 10th St. N.W.
Atlanta, GA 30318
(404) 875-9211
www.sreb.org

The *HSTW* Assessment

Since 1988, schools in the *High Schools That Work (HSTW)* network have assessed 12th-grade students' knowledge and skills in reading, mathematics and science. Approximately 37,000 seniors in the Southern Regional Education Board (SREB) states participated in the 2006 reading assessment, which linked their reading performance to learning experiences. Approximately 75 percent of all participating students in SREB states had completed at least four credits in career/technical concentrations.

Students participating in the Assessment complete three subject tests — reading, mathematics and science — consisting of multiple choice and constructed response questions. Performance on these subject tests is measured at three proficiency levels: Basic, Proficient and Advanced. Students also complete an extensive survey about their learning experiences and goals, which is used to disaggregate student achievement according to school and classroom experiences.

HSTW Assessment Reading Performance Levels

At the **Basic** level in reading, seniors demonstrate a general understanding of grade-level texts. They locate specific information and identify the main ideas and purpose. Students make simple connections between ideas within a text and provide general evaluations of the meaning or purpose. They recognize the appropriate meaning of words and phrases within the context of a passage. In addition, they identify interpretations and text-based support for those interpretations.

At the **Proficient** level, seniors demonstrate understanding of grade-level texts by identifying explicitly stated ideas; comparing and contrasting information in different parts of a text; determining the relative importance of different ideas; and providing overall interpretations of a text's meaning based on organizational patterns, language and graphic features. Proficient readers recognize connections between ideas in the text, with other texts and with real-life experiences. They can extend ideas in the text by making inferences such as predictions and conclusions.

At the **Advanced** level, seniors demonstrate a thorough understanding of grade-level texts by integrating text ideas, explaining causal relationships, and evaluating complex information and organizational features. Students analyze text ideas to provide specific and extensive support for evaluations and interpretations of the text. They evaluate an author's opinion and explain how that opinion is conveyed. They make connections between complex, deeply embedded ideas within the text, with other texts and with real-world experiences. They can interpret and explain specialized terminology.

The framework of the 2006 *HSTW* Assessment reading test was aligned with the National Assessment of Educational Progress (NAEP), more commonly known as the Nation's Report Card. For this assessment, students read for two purposes: to gain information and to perform a task. Reading questions are distributed across four broad reading skills:

- Initial understanding — comprehending the overall or general meaning of the selection
- Developing an interpretation — extending the ideas in the text by making inferences and connections
- Personal response — making explicit connections between ideas in the text and a student's own background knowledge and experiences
- Critical review — considering how the author crafted a text

Table 1 describes the knowledge and skills expected at each reading proficiency level within the reading purposes and reading stances. Sample questions that correspond to the levels are provided in Appendix A.

Table 1
Reading Skills and Knowledge Tested by the 2006 *HSTW* Assessment Reading Test

Reading Test Content	READING LEVEL		
	Basic	Proficient	Advanced
Reading Purposes			
Gain information	Locate specific information and identify main ideas and purposes. Make simple inferences, such as identifying supporting details and organizational structures.	Make complex inferences across a text, such as comparing ideas, problems or situations; make predictions.	Consider texts critically, including evaluation of the strength of evidence the author uses to support his/her position. Judge the logic, credibility or coherence of an argument.
Perform a task	Locate specific information in text or graphics necessary to complete a task.	Determine the importance of information within or across texts.	Analyze how the author presents information to help a reader perform a task.
Reading Stances			
Initial understanding	Demonstrate a general understanding of grade-level texts.	Identify explicitly stated ideas.	Integrate text ideas to demonstrate global understanding of texts.
Developing an interpretation	Identify interpretations and text-based support for those interpretations.	Compare and contrast information in different parts of the text, determine the relative importance of different ideas, provide overall interpretations of a text's meaning and recognize general organizational features.	Analyze text ideas to provide specific and extensive support for evaluations and interpretations of the text. Interpret and explain specialized terminology.
Personal response	Make simple connections between ideas within a text and identify general meaning or purpose.	Extend ideas in the text by making inferences, such as predictions and conclusions.	Make connections between complex, deeply embedded ideas within the text, with other texts and with real-world experiences.
Critical review	Recognize and identify the usefulness of a text for a specific purpose.	Use details from a text to analyze how an author presents information.	Evaluate an author's opinion and explain how that opinion is conveyed. Evaluate how an author crafts a text.

Source: NAEP and 2006 *High Schools That Work* Assessment

How well do seniors in HSTW schools in SREB states read?

Approximately 37,000 seniors from SREB states participated in the 2006 *HSTW* Assessment reading test. Seven percent of these students achieved at the Advanced level, 32 percent at the Proficient level, 36 percent at the Basic level and 25 percent below the Basic level. The group of students achieving at the Proficient or Advanced levels represents a much different demographic than the group of students achieving at or below the Basic level. The group of students scoring at the Proficient level or above included a lower percentage of minority students and students whose parents had not pursued education after high school than the group of students scoring at the Basic level or below. (See Table 2.)

Table 2
Demographics of Students Participating in the 2006 *HSTW* Assessment Reading Test:
***HSTW* Sites in SREB States**

	All Students (37,450 students)*	Reading at Proficient or Advanced (14,396 students)	Reading at or Below Basic (26,054 students)
Ethnicity			
White	55%	68%	47%
Black	29	18	37
Other	16	14	17
Parents' Education			
At least some college education	62%	72%	55%
No education beyond high school	38	28	45

* Total number includes only students with a valid reading score.

Source: 2006 *High Schools That Work* Assessment

Note: Differences in the mean scores between the two groups of students are significant at $p < .01$ (t -test).
Differences between the two groups of students in their frequency distributions of all measurements are significant at $p < .01$ (chi-square test).

In 2005, a representative sample of more than 21,000 12th-graders from across the country participated in the NAEP reading assessment. Of this population, 33 percent were minority students, compared with 45 percent of students in SREB states participating in the *HSTW* Assessment.¹ Thirty-four percent of students participating in the NAEP reading assessment performed at or above the Proficient level, with 16 percent of black students performing at or above the Proficient Level. On the *HSTW* reading test, 39 percent of all students and 29 percent of black students in SREB states performed at or above the Proficient level.

¹ NCES. *The Nation's Report Card: 12th-Grade Reading and Mathematics 2005*. U.S. Department of Education, 2007.

Reading Performance Linked to Mathematics and Science Performance

Success in reading will not guarantee high performance in other subject areas, but the correlations between subject areas are remarkably strong. For instance, almost nine of every 10 students who performed at the Proficient level in reading also performed at Proficient or Basic levels in mathematics, and almost eight of 10 performed at the Proficient or Basic levels in science. (See Table 3.) Further, no student performing below the Proficient level in reading performed at the Advanced level in either mathematics or science, and only one in 20 students scored at the Proficient level. **Higher reading skills appear to be necessary for students to achieve at or above the Basic level in mathematics and science.** These results suggest that, in order to advance achievement in academic and technical disciplines, schools must purposefully embed reading standards and literacy strategies into all courses in ways that engage students in comprehending and summarizing the language of the discipline.

Table 3
Reading Achievement Linked to Mathematics and Science Achievement
on the 2006 *HSTW* Assessment

	Reading at Advanced Level	Reading at Proficient Level	Reading at Basic Level	Reading Below the Basic Level
Reading achievement of students in SREB states	7%	32%	36%	25%
Mathematics Proficiency Level				
Advanced	21%	3%	0%	0%
Proficient	48	23	5	2
Basic	31	61	48	21
Below Basic	1	13	47	77
Science Proficiency Level				
Advanced	25%	4%	0%	0%
Proficient	53	28	6	2
Basic	20	47	28	7
Below Basic	1	21	66	91

Source: 2006 *High Schools That Work* Assessment

Do the learning experiences of students who read at higher proficiency levels differ from those of students reading at the Basic level or below?

Specific learning experiences reported by students can be linked to higher reading performance on the 2006 *HSTW* Assessment. (See Table 4.) Students performing at the Proficient or Advanced levels on the reading test were more likely to:

- experience higher expectations and more engaging learning in all courses.
- complete the *HSTW*-recommended curriculum² and experience high-quality career/technical studies and worksite learning.
- report intensive experiences in all measures of *HSTW* implementation, including:
 - teachers who engaged them in reading, writing and making oral presentations more frequently in all classes.
 - mathematics courses that required them to complete reading problems and explain both orally and in writing, using correct mathematical terminology, how they solved mathematics problems.
 - science courses in which they had to prepare written and oral presentations of their findings.
 - guidance and advisement aimed at helping them set post high school plans and understand the importance of high school success in achieving their future goals.
 - extra help and support that helped them meet course standards.

Table 4
Reading Achievement Linked to Key *HSTW* Implementation Indicators

Indicators	Reading at Proficient or Advanced	Reading at or Below Basic
Met <i>HSTW</i>-Recommended Curriculum Goals		
Four credits in college-preparatory/honors English	58%	38%
Four credits in mathematics (including Algebra I, geometry, Algebra II and above)	70	41
Three science credits (including at least two college-preparatory and lab-based credits)	76	54
Implementation of <i>HSTW</i> (intensive level)		
High Expectations in Classroom	23%	14%
Literacy Across the Curriculum	23	12
Numeracy Across the Curriculum	30	22
Relevant Science Instruction	29	14
Quality CT Classes	23	18
Worksite Learning	62	46
Guidance	53	44
Importance of High School Perceived by Students	45	35
Quality Extra Help	39	30
Academic Content Integrated into CTE	16	10

Source: 2006 *High Schools That Work* Assessment

Note: Differences between the two groups of students in their frequency distributions of all measurements are significant at $p < .01$ (chi-square test).

² The *HSTW*-recommended curriculum consists of four credits in college-preparatory English, four credits in mathematics (Algebra I and higher) and three credits in lab-based or college-preparatory science.

It is clear that students who experienced an engaging and more rigorous set of learning experiences had higher reading achievement. School leaders and teachers should consider these questions: Do students reading at the Proficient level and above do so *because* they experience a challenging curriculum and a richer set of learning experiences? If lower-achieving students were exposed to such experiences, would significantly more students perform at or above the Proficient level?

Academic Achievement of Demographically Matched Student Groups

To address the two questions above and ensure that the differences in performance could not be attributed only to differences in ethnicity or parents' education, SREB compared student sample groups that were demographically matched. A random sample of 7,000 students performing at or below the Basic level on the 2006 *HSTW* Assessment reading test was matched to the demographic characteristics of the group of students who scored at the Proficient and Advanced levels — 68 percent white students, 18 percent black students, 14 percent students from other minorities. In both groups, 72 percent of students reported their parents had some education after high school and 28 percent reported their parents had no further education after high school.

When comparing these two demographically matched groups, SREB found that students reading at the Proficient level and above also achieved higher scores on the mathematics and science tests than students reading at or below the Basic level. (See Table 5.) The average mathematics and science achievement of Proficient-level readers was approaching the Proficient level, while the average mathematics and science achievement of students reading at or below the Basic level was below Basic.

Table 5
Achievement of Demographically Matched Student Groups
on the 2006 *HSTW* Assessment

	Reading at Proficient or Advanced (14,313 students)	Reading at or Below Basic (7,000 students)
Mean Scores (0-500 scale)		
Reading	305	261
Mathematics	320	290
Science	320	279

Source: 2006 *High Schools That Work* Assessment

Note: Differences in the mean scores between the two groups of students are significant at $p < .01$ (*t*-test).

School and Classroom Experiences of Demographically Matched Student Groups

Higher-performing students had a richer and more rigorous, relevant and supportive set of literacy experiences in high school than those who scored at or below the Basic level, even when the two groups of students were matched demographically. Significantly more students reading at higher levels completed four years of college-preparatory English, four years of mathematics (Algebra I and higher) and three lab-based science courses. More high-achieving students also experienced high-quality career/technical classes that engaged them in using technical materials to complete authentic assignments in both school labs and work settings. (See Table 6.)

Table 6
Reading Achievement Linked to School and Classroom Experiences
of Demographically Matched Student Groups

Indicators	Reading at Proficient or Advanced	Reading at or Below Basic
Met <i>HSTW</i>-Recommended Curriculum Goals		
Four credits in college-preparatory/honors English	58%	40%
Four credits in mathematics (including Algebra I, geometry, Algebra II and above)	70	43
Three science credits (including at least two college-preparatory and lab-based credits)	76	55
Implementation of <i>HSTW</i> (intensive level)		
High Expectations in Classroom	23%	13%
Literacy Across the Curriculum	23	11
Numeracy Across the Curriculum	30	21
Relevant Science Instruction	29	14
Quality CT Classes	23	17
Worksite Learning	62	47
Guidance	53	45
Importance of High School Perceived by Students	45	33
Quality Extra Help	39	30
Academic Content Integrated into CTE	16	10

Source: 2006 *High Schools That Work* Assessment

Note: Differences between the two groups of students in their frequency distributions of all measurements are significant at $p < .01$ (chi-square test).

HSTW data have consistently shown that the expectations of school leaders and teachers have a profound impact on student achievement. Students who scored at the higher levels on the 2006 *HSTW* Assessment reading test were more likely to report experiences that indicate a school culture of high expectations. (See Table 7.) They reported spending at least one hour on homework each day, often revising their work and working hard to meet standards. They were also more likely to report that their teachers set clear expectations for work and provided extra help.

Table 7
Emphasis on High Expectations

	Reading at Proficient or Advanced	Reading at or Below Basic
Students reported:		
Their teachers clearly indicated the amount and quality of work necessary to earn a grade of A or B at the beginning of a project or unit often .	52%	42%
Their teachers were frequently available before, during or after school to help them with their studies.	61	54
They usually spent, overall, one or more hours on homework each day.	27	18
They revised their essays or other written work several times to improve quality often .	43	32
They worked hard to meet high standards on assignments often .	52	39

Source: 2006 *High Schools That Work* Assessment

Note: Differences between the two groups of students in their frequency distributions of all measurements are significant at $p < .01$ (chi-square test).

A significantly higher percentage of students achieving at the Proficient and Advanced levels on the reading test reported being engaged in learning practices that emphasized reading and writing across the curriculum. Such practices include reading more books outside of English classes, demonstrating an understanding of the main ideas, comprehending technical materials and analyzing reading problems in mathematics classes. (See Table 8.)

Table 8
Emphasis on Reading and Writing Across the Curriculum

Indicators	Reading at Proficient or Advanced	Reading at or Below Basic
Students reported:		
They discussed or debated with other students about what they read in English or language arts classes at least monthly .	55%	39%
They read an assigned book outside of English class and demonstrated that they understood the significance of the main ideas at least monthly .	46	30
They read non-school-related materials outside of class for two or more hours in a typical week.	30	16
They read six or more books this year both in and out of school.	39	20
They have been assigned word problems in mathematics at least monthly .	85	67
They spent one or more hours reading non-school-related materials outside of class in a typical week.	48	31
Their career/technical teachers often stressed reading.	39	29
They have had to develop and analyze tables, charts and graphs in their school work often .	34	25
They revised their essays or other written work several times to improve their quality often .	43	32
They completed short writing assignments of one to three pages for which they received a grade in their English classes at least monthly .	84	69
They completed short writing assignments of one to three pages for which they received a grade in their science classes at least monthly .	35	28
They completed short writing assignments of one to three pages for which they received a grade in their social studies classes at least monthly .	48	36
They drafted, rewrote and edited writing assignments before receiving a grade in English classes monthly or weekly .	61	48
They prepared a written report of lab results for laboratory investigations in science at least monthly .	61	46
Their career/technical teachers often stressed writing.	39	29
They used word-processing software to complete an assignment or project often .	60	42
They were very well prepared and had the necessary knowledge and skills when they entered high school to succeed in CP courses in reading .	69	51
They were very well prepared and had the necessary knowledge and skills when they entered high school to succeed in CP courses in writing .	52	43
They completed a project that first required some research and a written plan before completing the task.	81	72

Source: 2006 *High Schools That Work* Assessment

Note: Differences between the two groups of students in their frequency distributions of all measurements are significant at $p < .01$ (chi-square test).

The higher-achieving students were more likely to write frequently in their English, science and social studies classes and were often required to rewrite materials until they met standards. As a result, students were engaged in finding their own voice with the language of the discipline to a greater extent than students reading at or below the Basic level. They reported using technology to complete assignments, making oral presentations, and researching and organizing information to develop meaningful essays or work plans. Furthermore, these students were more confident that they were well-prepared to complete rigorous high school studies.

Classroom assignments and assessments that require students to read, interpret and analyze the readings, write and make oral presentations can improve students' reading achievement. Furthermore, the differences in school and classroom experiences for these two demographically matched groups indicate that the right set of experiences can impact achievement not only in reading, but across content areas.

Immediate Actions to Improve Student Reading Performance

With clear evidence that students' reading and learning experience affect achievement across content areas, schools and states need to take action to ensure that all students are getting the right set of experiences. **If school leaders and teachers want to advance student achievement in all courses, they must take purposeful actions to embed reading skills and literacy strategies across the curriculum in ways that advance students' reading achievement *and* their understanding of the course content.**

Students do not become proficient readers by simply reading more or taking more English classes; they need to complete assignments and assessments in all classes that require them to demonstrate the ability to comprehend and analyze a variety of print materials at the Proficient level. Students will not perform at or above the Proficient level when reading assignments are aligned to the Basic level or below. Teachers in each content area need to understand what it means to read at the Proficient level and then align their assignments and expectations to Proficient-level standards.

Embedding reading-for-learning skills and strategies in all courses has implications for achievement beyond the English classroom. Students who are not proficient readers achieve lower scores in mathematics and science because they have not been engaged in reading and learning that develops critical thinking and analytical skills in the context of these disciplines. To address this issue, all teachers need to understand critical reading standards and embed those standards into assignments to improve achievement in reading and in the content area.

To get more students to achieve at or above the Proficient level, teachers need to ask them to compare ideas, problems and situations and make predictions. Teachers often ask students to gain information from a text. However, as outlined in Table 1, expectations for and measurements of how students gain information can vary widely. If students only are asked to locate the answers to specific questions, they are performing at the Basic level. Rather than asking students to define photosynthesis, for example, teachers can ask students to compare photosynthesis with other energy conversion processes. **Examples of Proficient-level activities across content areas are provided in Appendix A.**

In addition to designing more challenging assignments, teachers need to provide reading assessments that reflect the appropriate level of rigor. Such assessments might require students to read content-related passages and then answer questions that connect the passages to the skills and knowledge taught within the unit or lesson. This process differs dramatically from the traditional recall of knowledge that too often forms the basis of classroom assessments. In a personal finance class, for example, teachers can require students to read the instructions on an IRS form and then answer questions about and complete the form. A Proficient-level question might ask students to explain why some individuals may be ineligible to file a 1040-EZ income tax return form. The instructions list conditions to qualify, but a Proficient reader can extend that reading to name conditions that do not meet the qualifications. **Sample Proficient-level assessment questions are included in Appendix B.**

Do not expect teachers to become reading instructors, but rather to incorporate reading strategies into content-specific materials to foster greater student achievement in both reading and the content area. To support teachers in designing activities and assessments with skills required for proficient readers, administrators need to provide opportunities for teachers to understand and practice new instructional strategies.

School leaders can encourage conversations among faculty members about the types of student work they assign. Classroom observations can focus on how teachers incorporate higher-level skills into their instruction. Departmental faculty study groups can use the rubrics of sample questions and assignments in Appendices A and B to determine if assignments require students to use Proficient-level skills. Teacher-leaders can be asked to bring sample assignments to faculty meetings and study groups and demonstrate how their assignments and assessments require students to read and think at the Proficient level. This report can be used as a starting point to engage the faculty in discussions about why and how they can incorporate literacy across the curriculum. Sample discussion questions can be found in Appendix C.

Actions Schools Can Take to Improve Student Reading

- Align assignments and assessments to the Proficient level.
- Provide access to professional development for teachers of all content areas to build their understanding of the types of work required for students to meet Proficient-level reading standards. Assist all teachers to teach and assess in ways that require students to demonstrate critical reading and thinking skills, rather than rote memorization of facts.
- Give assignments that will develop students' abilities to read, interpret, analyze and extrapolate expository materials in all classes. Provide professional development and common planning time to help teachers learn how to make such assignments and develop them in collaboration with other teachers.
- Enroll all students in rigorous college-preparatory English. Students in higher-level English courses read more, analyze a wider variety of texts, write and revise their work more often and discuss what they have read.
- Develop a schoolwide literacy plan³ that outlines the types and amount of reading that students will complete in all classes and ways in which they will demonstrate their understanding of what they read. All teachers need to take responsibility for assigning the equivalent of two to three books each year, and English teachers should assign eight to 10 books. Materials should be directly related to course content.
- Provide access to technology so students have the opportunity to word process their writing, develop charts and graphs and conduct research.
- Provide access to a wide variety of high-interest materials for independent reading that will appeal to both male and female students. This may include classroom libraries or after-hours access to the library media center.
- Require struggling readers to participate in extra help. Intervention may range from ninth-grade catch-up courses and summer bridge programs to after- or during-school tutoring to help more students achieve at grade level on the most essential reading standards. Focus extra-help programs on building skills tied to college and career readiness rather than homework assistance.

³ For more information on developing a literacy plan, see *Literacy Across the Curriculum: Setting and Implementing Goals for Grades Six through 12*, SREB, 2003.

Actions States Can Take to Improve Student Reading

- Convene expert panels of business leaders and high school and college faculty to define the types of reading skills, materials and proficiency levels needed for success in postsecondary studies and careers.
- Create a reading framework of standards that reflects the level of reading required for postsecondary study and careers. The framework would include the types of expository text most often encountered in entry-level college courses and careers and specific recommendations for each of the core academic and career/technical education classes.
- Embed reading skills into the state standards for all content areas. Include the types of reading skills that are specific to success in different subject areas.
- Require teacher preparation programs to address the types of assignments teachers will need to use to develop higher-order literacy skills in their content areas. Link courses about reading methods to both content and grade-level certifications.
- Ask schools to develop literacy plans as part of their comprehensive school improvement planning process. The literacy plan would describe ways in which literacy will be embedded in all content areas, including the amount and types of reading assigned. Plans can include a process to review teacher assignments and assessments that reflect the kinds and complexities of materials and reading skills necessary for success in each course.
- Provide resources for each middle grades school and high school to retain a literacy coach who can assist faculty members in developing strategies, assignments and assessments that improve students' reading achievement. Some schools may also need reading specialists who work directly with students in need of intensive intervention. The state can provide funding to schools and training to literacy coaches.
- Offer professional development opportunities that help teachers use research-based literacy strategies in their specific disciplines. Customize training for each content area, as literacy strategies may vary from discipline to discipline. Training can be offered in a variety of formats, such as online workshops, regional sessions or extended summer academies. States may also require additional training in content literacy for certificate renewal.

Appendix A: Sample Assignments Aligned to Proficient-Level Skills

2006 HSTW Assessment Reading Test

Reading Test Content	Proficient-Level Skills	Sample Activities to Develop Proficient and Advanced Reading Skills
Reading Purposes		
Gain information	Make complex inferences across a text, such as comparing ideas, problems or situations. Make predictions.	<p>Science: Students review a list of aphorisms (e.g., red sky at night, sailors’ delight). They generate a list of possible pieces of evidence to support the reasons why people believe the statements. Then they research whether each statement is true. Groups of students combine their research into a feature article explaining the fact and fiction behind such statements.</p> <p>English: Students read radio transcripts or editorial columns by individuals with strong opinions. They identify the main points and the evidence presented to support each point. They then analyze what information is missing and whether the source is reliable or using false reasoning. Based on the analysis, they draft an e-mail message to the person to ask questions or seek missing evidence.</p>
Perform a task	Determine the importance of information within or across texts.	<p>Construction Trades: Students receive a section of a repair or an installation manual. First, they complete the task as described in the text. Second, the teacher poses a situation that is similar but not identical to what is described in the text (e.g., “What would you do if the clasp were broken?”). Students determine which information in the text would be most helpful to resolving the similar situation.</p> <p>Mathematics: Students survey their textbook to determine the organization patterns used most often. Using the analysis, groups of students write a guide, “How to Read Your Math Book” and distribute it to freshmen. The guide can include common graphic organizers, note-taking strategies and relationships of text to layout design.</p>
Reading Stances		
Initial understanding	Identify explicitly stated ideas.	<p>Any Career/Technical Field: Students research a person who has made a significant impact on the profession they are studying. After reading three to five articles about that person’s background and contributions, they make oral presentations on “What Made This Person Who She Was?”</p> <p>Humanities or English: Students read the lyrics of a variety of songs by a former artist (e.g., The Beatles, Elvis Presley), select phrases that they particularly like or that represent the time period and then rewrite them in the language of today. They share the phrases in a classroom blog (a Web log or journal). They also explain subtle differences between their paraphrases and the artist’s original words.</p>

Sample Assignments Aligned to Proficient-Level Skills (*continued*)

2006 HSTW Assessment Reading Test

Reading Test Content	Proficient-Level Skills	Sample Activities to Develop Proficient and Advanced Reading Skills
Reading Stances (<i>continued</i>)		
Developing an interpretation	Compare and contrast information in different parts of a text, determine the relative importance of different ideas, provide overall interpretations of a text's meaning and recognize general organizational features.	<p>Health and Physical Education: Students select a common message (e.g., importance of exercise). They locate three to five radio or TV commercials, Internet articles, editorials, brochures or other media related to the message. For each piece, they analyze the point of view and how it is conveyed and then summarize the message being sent. Using the analysis, they present a consumer's guide speech on the trustworthiness of authors and media.</p> <p>Science or medical science: Before reading a selection that includes extensive use of medical terms, students receive a list of common biological roots, affixes and cognates. They hypothesize the meanings of words based on their parts. Small groups work together to use context clues to confirm the meanings. They then create footnotes to the original text to explain the meanings of the technical terms.</p>
Personal response	Extend ideas in the text by making inferences such as predictions and conclusions.	<p>Social studies: Students read newspaper headlines printed in the United States and Great Britain on the day after the bombing of Pearl Harbor to compare the reactions from the two countries. Using information from this reading and other research, they write point-counterpoint editorials on each country's obligation to the Pacific war front.</p> <p>Business and Marketing: Students visit Web sites to collect a variety of electronic advertisements for a type of product (e.g., clothing). They create a WebQuest, an inquiry-oriented activity on the Internet, where other students can view the ads to identify the intended audience and the type of persuasive techniques. They use the results to prepare a letter to the seller about whether their Internet advertising is effective for particular audiences.</p>
Critical Stance	Use details from a text to analyze how an author presents information.	<p>Social Studies or English: Students read a historical essay such as Swift's "A Modest Proposal" that offers a "solution" to poverty and hunger. They analyze the argumentation pattern and conduct research on more recent proposals for solving the same problem. Using the modern information, they construct a persuasive essay that follows the same organizational pattern as the original essay.</p> <p>Family and Consumer Science: Students read selections on the same topic (e.g., animal testing for cosmetics) from sources intended for three different audiences (e.g., consumers, lab researchers, retailers). The students write short essays or create multimedia presentations that compare how the authors treat the topic and hypothesize how the choice of audience impacts the authors' choices about language, organization and style.</p>

Appendix B: HSTW 2006 Reading Test Content and Sample Questions by Reading Proficiency Levels

Reading Test Content	READING LEVEL		
	Basic	Proficient	Advanced
Reading Purposes			
Gain information	What was the main point of Mr. Minow's address?*	Why did Mr. Minow refer to television as "a vast wasteland"? Give an example from the speech to support your answer.**	Imagine that Mr. Minow is preparing to deliver another address to the broadcasting industry. Would his original speech apply just as well to television programming today? Explain why or why not.**
Perform a task	According to the guide, at which of the following times of day would the reduced Metrorail fare be in effect?*	Why is it important that you file your tax return before April 16?***	Is the information in this document easy to use? Support your answer with information from this text.***
Reading Stances			
Initial understanding	What is the guide to Metro's Fares and Passes supposed to help you do?*	If you cannot be claimed as someone's dependent, what is the maximum amount you can claim for a personal exemption?***	Complete the income tax return, using the table and the following W-2 statement. You have no taxable interest to claim.***
Developing an interpretation	When using the 1040EZ tax return, the amount of income tax owed is determined by your***	Why are the lines on the tax return numbered?***	What did Mr. Minow mean when he said that "the public interest is made up of many interests" (page 4)? How did he think this should affect television programming?***
Personal response	Choose one of the locations listed in the guide where Metro passes can be purchased. Describe one convenience and one inconvenience of buying passes at that location.*	Name two factors that would make you ineligible to file a 1040EZ tax return.***	List two mistakes that you could make in completing your tax return that might delay its processing.***
Critical stance	Recognize and identify the usefulness of a text for a specific purpose.	Suggest one way to improve the guide to Metro's Fares and Passes to make it easier to use. Explain how it would be an improvement.*	Using information from the speech, explain why Mr. Minow believed that television programmers bear greater responsibility to the public than do newspaper publishers.**

Items are from three NAEP released passages and corresponding questions (All can be found at <http://nces.ed.gov/nationsreportcard/reading/>):

* Your Guide to Metro's Fares and Passes ** Newton Minow "Address to the Broadcasting Industry" *** Instructions for Form 1040EZ

Appendix C: Faculty Study Questions and Activities

This publication can provide a starting point for schools to address their literacy plans and embed reading standards and literacy strategies in all classes. School leaders may want to lead their faculties in the following activities or convene a study team to address the questions below.

Study Questions

- Do students read well because they are placed in more challenging classes? Do students with lower reading skills continue to perform poorly when placed in lower-level courses?
- How can the quality and type of assignments given to students in the middle grades and high school impact student achievement?
- How does reading performance affect achievement in other disciplines? Can students with poor reading skills perform well in other classes (e.g., mathematics, science, social studies, career/technical courses)?
- Which strategy is more effective in advancing reading achievement: developing special reading courses or including reading strategies in all disciplines? Which strategy does your school currently use?
- What would a Proficient-level reading assignment look like in various disciplines at each grade level?
- Consider the experiences students at your school report. How do the reported learning experiences of students reading at or above the Proficient level differ from students reading at or below the Basic level?
- What correlations exist between reading achievement and achievement in other discipline areas at your school?

Activities to Embed Reading Standards and Literacy Strategies Across the Curriculum

- Collect reading assignments from a variety of discipline areas. Lead the faculty in a peer-review of assignments and, using Table 1 of this publication, determine the proficiency level, reading purpose and reading stance of each assignment. Working in teams, rewrite assignments to reflect the Proficient level.
- Ask a focus group of teachers to deliberately emphasize reading standards and literacy strategies daily or weekly. Over time, compare the growth in reading achievement of students in these classrooms with a control group of students whose teachers have not changed their instruction, assignments or assessments.
- Form a cross-disciplinary team of teachers to attend a workshop on embedding Proficient-level reading standards into all courses, using effective literacy strategies. After these teachers attend the workshop, have them implement the strategies they learn and then set up model classrooms for other teachers to visit. Design a way to redeliver the training to other teachers.
- Ask team members to research articles, guides and other materials on embedding reading standards and literacy strategies into all courses, and then gather their findings into a resource guide to share with the entire faculty during a faculty meeting.

SREB Publications that Support Improved Reading Achievement

Getting Students Ready for College and Careers: Transitional Senior English

This report describes and defines the reading and writing readiness standards that are needed to prepare students for postsecondary studies and careers. It provides samples of related school assessments to help teachers provide the support and class structure needed to get students to the readiness level expected by colleges. Also included are samples of learning activities to provide a structure for students to improve their literacy preparation.

(08V04); 2008

Planning for Improved Student Achievement: Ten Steps for Planning and Writing Standards-Based Units

Data from national assessments and classroom visits show that many state assessments hold students to minimum standards, resulting in many students not being taught to true grade level. To help schools get significantly more students achieving at the proficient level, SREB has developed this guide to planning and writing standards-based units. Standards-based units focus on rigorous lessons, quality assessment and the personal attention that gives meaning to learning. This guide explains what standards-based units look like, how they work and how they can be developed using a 10-step process.

(08V05); 2008

Improving Reading Achievement in Middle Grades Rural Schools

This research brief addresses low reading achievement among rural middle grades students, particularly in the Southern states. On a 2003 NAEP-referenced reading exam taken by more than 3,000 eighth-graders at *Making Middle Grades Work* network sites, 29 percent scored below the Basic level. The report offers strategies for addressing the problem, provides data that will help teachers and administrators assess the reading achievement of students, and provides a foundation for raising the literacy expectations of all students in all subject areas. It shows that students who take an advanced English curriculum and who have intensive literacy experiences in a culture of higher expectations achieve higher reading scores.

(05V69); 2005

Literacy Across the Curriculum: Setting and Implementing Goals for Grades Six through 12

This volume is essential for state, district and school leaders who plan to implement schoolwide literacy programs. It provides concrete, research-based steps not only to raise reading and writing achievement but also to help students learn more in every class by using literacy skills. The guide focuses on five literacy goals: reading 25 books across the curriculum; writing weekly in all classes; using reading and writing strategies; writing research papers; and taking rigorous language arts classes. Site Development Guide #12.

(03V63); 2003

Getting Students Ready for College-preparatory/Honors English: What Middle Grades Students Need to Know and Be Able to Do

This curriculum framework is an effort to ensure that students leave the middle grades with the knowledge and skills to succeed in college-preparatory/honors English. Educators can use this framework in developing course syllabi, lesson plans, assignments, assessments and professional development activities that will prepare students for rigorous English classes in high school.

(03V61); 2003

Improving Reading and Writing Skills in Language Arts Courses and Across the Curriculum (2000)

The 1998 *High Schools That Work* Assessment contains good and bad news about the reading performance of the 23,900 career-bound students who participated in the assessment at experienced *HSTW* sites. Based on the findings, this research brief answers the following three questions.

- What progress are *HSTW* sites making in advancing students' reading achievement?
- What conditions are associated with higher reading achievement?
- How can schools get at least 85 percent of career-bound students to meet the *HSTW* reading goal?

(00V09); 2000
