SREB Readiness Courses:
Preparing Students for Success

SREB has worked for over a decade with states to introduce policies and programs that address the issue of too many students graduating from high school not prepared for success in the college classroom or workplace.

For states and schools that wish to close the readiness gap, SREB has developed two sets of readiness courses in literacy and mathematics:

The *Ready for College courses* are designed to give under-prepared students a solid foundation for success in college and postsecondary training.

The *Ready for High School courses* offer an earlier intervention, reaching underprepared students as they enter high school, which for many students is the most critical time in their education in determining future success.

Why the SREB Readiness Courses Are Needed

The link between education and economic development is stronger than ever. As the United States struggles to meet its workforce and educational needs in the 21st century, the single biggest challenge is closing the readiness gap. Most students graduating from high school are not prepared for postsecondary studies. By 2020, 65 percent of all jobs will require education or training beyond high school; yet the majority of high school graduates lack the most basic skills in literacy and mathematics (Georgetown Center on Education and the Workforce analysis).

The Condition of College & Career Readiness (ACT, 2015) reports that only 46 percent of the students taking the ACT exam in 2015 met the College Readiness Benchmark in reading, and only 42 percent of the students met the College Readiness Benchmark in math. More evidence of the readiness gap can be found in the ACT's National Career Readiness Certificate (NCRC) assessment. It indicates an individual qualifying for the ACT NCRC Gold Level has the essential foundational skills (applied mathematics, reading for information and locating information) required by 93 percent of jobs, yet only 19 percent of individuals who earn an NCRC credential qualify at the Gold Level or higher.

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Ready for College Courses:
Prepared for College and Careers

SREB offers two Ready for College courses, *Literacy Ready* and *Math Ready*, designed to prepare students for college before they graduate from high school.

By implementing senior-year courses in literacy and mathematics for underprepared students, schools can give students the foundation they need for success in postsecondary studies.

These courses are being implemented in thousands of high schools across the nation with impressive results; pre- and post-test studies indicate that over 67 percent of students in SREB Readiness courses improve their ACT subscores, with over 75 percent of the students in Math Ready improving their math subscores. States can close the readiness gap of their high school graduates by implementing Literacy Ready and Math Ready.

Ready for College: *Literacy Ready*

This course utilizes a disciplinary literacy approach that teaches students strategies for reading and understanding complex texts in various subject areas. Students learn to develop and defend ideas from textbooks and write about them in several disciplines such as English, history and biology on a college level. The unit structure conforms to the Literacy Design Collaborative (LDC) framework while addressing college- and career-readiness standards in a challenging curriculum.

English Unit 1: *The Shallows* by Nicholas Carr

The first English unit has students read informational text from Nicholas Carr's *The Shallows: What the Internet is Doing to Our Brains*, as well as related supplemental texts. For the unit conclusion, students collect evidence for a stance-based synthesis presentation.

History Unit 1: The Civil Rights Movement

This unit focuses on the Civil Rights Movement and changes in the 1960s. Students draw information from a textbook chapter, a film, a lecture and a number of primary source documents as they learn to read history, recognize implicit and explicit claims and evidence, write a historical account and form related arguments.

Science Unit 1: Nutrition

Students are introduced to disciplinary literacy in the sciences — learning strategies for reading multiple types of text, including science textbooks, research articles and news articles. They discover a variety of ways to write about science — from personal reflection to public consumption — and to comprehend science information in multiple representations.

English Unit 2: *Ubik* by Philip K. Dick

The second English unit moves into literary study, using *Ubik* by Philip K. Dick, as the central text. For the unit conclusion, students collect and present evidence for a literary argumentative essay. With a literary argument in hand, students debate a question drawn from the theme of the novel.

History Unit 2: U.S. Foreign Affairs

This unit focuses on U.S. involvement in foreign affairs: the Cuban Missile Crisis and the Vietnam War. Students read multiple texts and place a strong emphasis on writing historical arguments.

Science Unit 2: DNA and Biotechnology

Students extend their understanding of reading and writing in science by reading research articles and textbook materials, taking notes from lecture videos and making predictions using scientific models. Students face increasingly greater depth in writing as they prepare and present an evidence-based scientific poster in a research symposium.
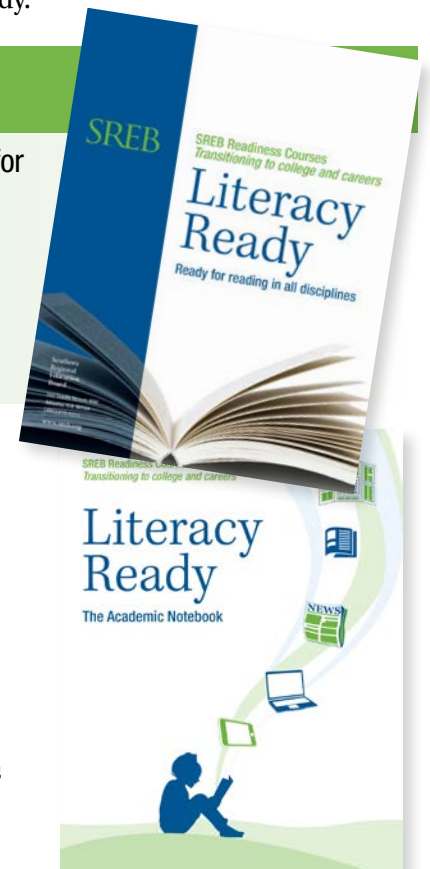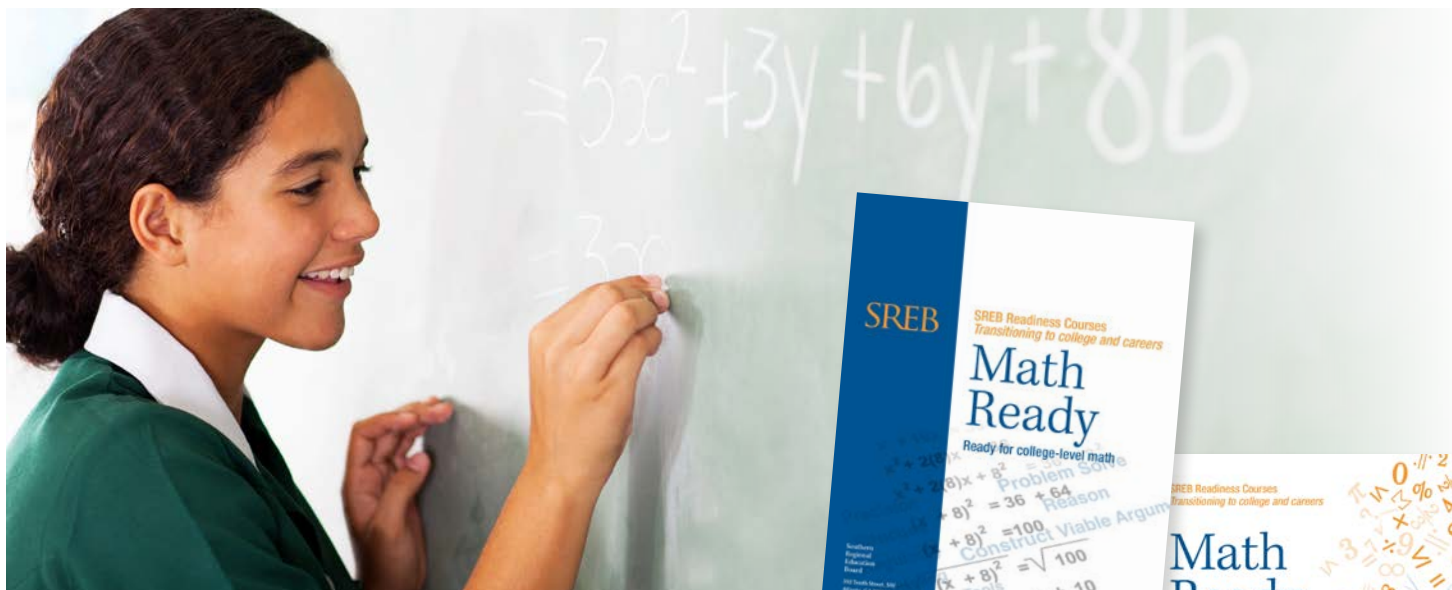
Ready for College: *Math Ready*

This course emphasizes an understanding of math concepts, as opposed to memorizing facts. Math Ready students learn the context behind procedures and come to understand the "whys" of using certain formulas or methods to solve a problem. By engaging students in real-world applications, this course develops critical thinking skills that students will use in college and careers.

Unit 1: Algebraic Expressions

This unit focuses on strengthening students' understanding of basic numerical operations and manipulations, including multiple representations of equivalent expressions. The unit contains a unique approach that students will find entertaining while facilitating mathematical growth.

Unit 2: Equations

The equations unit takes a nontraditional, active-learning-based approach to reviewing fundamentals of solving one-, two- and multi-step equations. Topics include linear equations, linear equations that include absolute values and linear inequalities.

Unit 3: Measurement and Proportional Reasoning

This unit deals with conversions, using proportions for scaling and area and volume. It requires students show higher-order thinking and number sense, which helps them make connections with math and science or other subjects in an applied setting.

Unit 4: Linear Functions

This unit takes an in-depth study of linear functions. Students graph and write equations and interpret their meaning in context of the slope and y-intercept. It concludes with students collecting data and writing a line of best fit.

Unit 5: Systems of Linear Equations

The unit is about solving systems of linear equations. Students classify solutions as well as set up and solve problems using systems of equations. Students choose the best way to solve a system of equations and explain their solutions.

## Unit 6: Quadratic Functions

This unit is an expansive look at quadratic functions: their graphs, tables and algebraic functions. It stresses multiple approaches to graphing, solving and understanding quadratics as students explore, make conjectures and draw conclusions in group-work settings.

Unit 7: Exponential Functions

Students gain fluency in exponential functions through varying real-life financial applications/inquiries. The unit builds understanding of these higher-level functions and lets students reflect upon the ramifications of their future financial choices.

Unit 8: Statistics

This unit brings an active-learning approach to probability and statistics. The primary emphasis is on linear regression and fitting equations to data. Simple probability topics support the understanding of regression, and some attention is given to normal distributions.
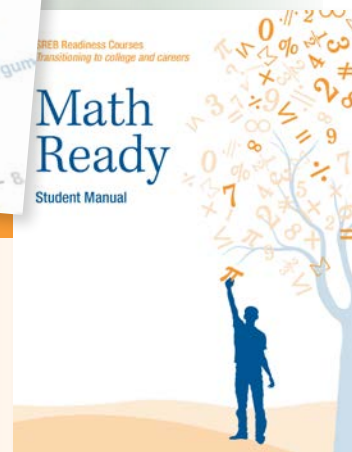
Ready for High School Courses: *Prepared for High School and Beyond*

To address the high failure and dropout rates that occur during the ninth grade, SREB has developed two courses, *Ready for High School Literacy* and *Ready for High School Math.* These courses strengthen underprepared students as they enter high school, setting them on the path to success and increasing their prospects for graduation.

Research shows that between 70 percent and 80 percent of students who fail in the first year of high school will not graduate. By implementing courses in literacy and mathematics for underprepared students, schools can increase their ninth-grade retention rates and ultimately their high school graduation rates. A ninth-grade student is three to five times more likely to fail a class than students in any other grade. The courses with the highest failure rates are English, algebra and biology.

Ready for High School Literacy

This course utilizes a disciplinary literacy approach that teaches students strategies for reading and understanding complex texts in various subject areas. Students learn to develop and defend ideas and write about them in several disciplines, such as English, history and science, on a high school level. The unit structure conforms to the LDC framework while preparing students for the rigors of high school studies.

Ready for High School Literacy Outline

English Unit 1:   How the Brain Functions: What it Means to be Human

History Unit 1:   World War II: What Makes Nations Take Extreme Measures?

Science Unit 1:   What Will the Earth Look Like in a Million Years?

English Unit 2:   Fictional Text on the Study of the Human Brain

History Unit 2:   World History: Studying Texts as Historians

Science Unit 2:   Environmental Science: Constructing Arguments

Ready for High School Math

This course emphasizes understanding of math concepts rather than just memorizing procedures. In Ready for High School Math, students learn the whys of using certain formulas or methods to solve a problem. By engaging students in real-world applications, Ready for High School Math develops critical-thinking skills that students will use through-out their high school studies. The course consists of eight units, culminating in a capstone project.

Ready for High School Math Outline

Unit 1:   The Number System

Unit 2:   Ratios & Proportional Relationships

Unit 3:   Univariate Statistics and Probability

Unit 4:   Expressions and Equations

Unit 5:   Geometry

Unit 6:   Functions & Linear Relationships

Unit 7:   Systems of Linear Equations & Inequalities

Unit 8:   Capstone Project

Timeline

The Ready for High School courses are being class-tested during the 2015-16 school year and will be ready for implementation during the 2016-17 school year. Schools looking to implement the curriculum should send teachers to the SREB Readiness Courses Institute during the 30th Annual High Schools That Work Staff Development Conference in Louisville, Kentucky, July 2016.

Improve student outcomes in your school or district.

Contact John Squires at Ready@SREB.org for more information about the Ready for High School or Ready for College courses.