March 3, 2015

Dear EOC Members:

The Education Oversight Committee (EOC) staff has done some extensive comparisons of the new South Carolina College- and Career-Ready Standards for English language arts (ELA) and mathematics. The information is on our website.

To assist members in understanding the analyses and changes made to the standards since the EOC's December 2014 meeting, Dr. Rainey Knight and Dana Yow will be available at 10:30 a.m. on Monday, March 9, 2015 in Room 433 of the Blatt Building to answer your questions and provide an overview of the analyses.

If you have any questions or concerns, please let me know.

Sincerely,

Melanie Barton

Melanie Barton

David Whittemore
CHAIR

Daniel B. Merck
VICE CHAIR

Anne H. Bull

Bob Couch

Mike Fair

Raye Felder

Margaret Anne Gaffney

Barbara B. Hairfield

Nikki Haley

R. Wesley Hayes, Jr.

Dwight A. Loftis

Deb Marks

John W. Matthews, Jr.

Joseph H. Neal

Neil C. Robinson, Jr.

Molly Spearman

Patti J. Tate

Melanie D. Barton
EXECUTIVE DIRECTOR

SC EDUCATION OVERSIGHT COMMITTEE

Reporting facts. Measuring change. Promoting progress.

EDUCATION OVERSIGHT COMMITTEE

AGENDA

Monday, March 9, 2015
10:30 a.m.
433 Blatt Building

I.	Information Meeting on Standards Analyses	Dr. Rainey Knight Ms. Dana Yow
II.	Discussion and Questions	EOC Members
III.	Adjournment	

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CHAIR

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EXECUTIVE DIRECTOR

SOUTH CAROLINA EDUCATION OVERSIGHT COMMITTEE
Minutes of the Meeting
February 9, 2015

Members in Attendance: Mr. David Whittemore (Chair); Dr. Danny Merck (Vice Chair); Ms. Anne Bull; Dr. Bob Couch; Sen. Mike Fair; Mrs. Margaret Ann Gaffney; Ms. Deb Marks; Sen. John Matthews; Mr. Neil Robinson; Ms. Molly Spearman; and Ms. Patti Tate.

EOC Staff Present: Dr. Kevin Andrews; Mrs. Melanie Barton; Ms. Hope Johnson-Jones; Dr. Rainey Knight; Ms. Bunnie Ward; and Ms. Dana Yow.

Mr. Whittemore called the meeting to order, reminding individuals that the proceedings were broadcast live on ETV. He welcomed two new members to the EOC: Dr. Bob Couch, Director of Career Technical Education for the Lexington Five School District and the education appointee of Speaker Lucas fulfilling the unexpired term of Mr. Alex Martin; and (2) Molly Spearman, the new State Superintendent of Education. Mr. Whittemore asked Superintendent Spearman to address the EOC which she did.

Mr. Whittemore also reminded EOC members that Economic Interest Statements must be completed by March 30.

The first order of business was the approval of the minutes from the December 15, 2014 meeting. The minutes as distributed were approved.

Subcommittee reports were then received.

Academic Standards and Assessments Subcommittee

Dr. Merck reported for the Academic Standards and Assessments Subcommittee. He noted that on January 21 the State Board of Education gave first reading to the new English language arts standards. On February 11, the State Board will take up the new math standards. He expressed his appreciation for the members of the EOC Review Panels that worked with the Department staff and the Writing Panels to amend the standards. As soon as the EOC receives the new draft standards, the Subcommittee will begin work. Dr. Merck clarified questions from Sen. Fair and Sen. Matthews about the review process. He also referred the members to the revised timeline for the review and approval of new standards.

EIA and Improvement Mechanisms Subcommittee

Mrs. Barton reported for the EIA and Improvement Mechanisms Subcommittee. She updated the committee on the Fiscal Year 2015-16 EIA budget recommendations made by the EOC in December and the Governor's budget recommendations that were released in January. She noted that Governor Haley recommended that the base student cost of the Education Finance Act be increased from $2,120 to $2,200. Regarding reading, Governor Haley recommended an additional $6.4 million for reading coaches, $3.5 million for professional development and $3.0 million for Summer Reading Camps. She noted the emphasis again on technology and digital instructional materials. When asked about digital devices, she noted that districts are allowed to use their allocation of the $29 million for technology on devices but no other line item appropriations are funded in either version. Superintended Spearman, Sen. Fair and Mrs. Hairfield discussed the importance of districts and schools having the flexibility of choosing devices and digital instructional materials.

Early Readiness Assessment Subcommittee

Ms. Hairfield presented the recommendations of the subcommittee regarding the 2015 state district and school report cards. The state district and school report cards will publish data but no state rankings. Mrs. Hairfield noted that the profile of the graduate will be the focus of the next accountability system. Mrs. Hairfield made a motion that the EOC endorse the profile of the graduate. Ms. Bull seconded the motion. Ms. Marks asked a question about the inclusion of data on the report card that includes the freshman report, the percentage of students who graduated from the prior school year and are enrolled in a state two or four-year institution the following fall. Sen. Fair clarified that no personally identifiable information will be reported.

Superintendent Spearman raised concerns that the results of the teacher and principal evaluations be included on the report cards. She noted that there will likely be changes in the evaluations and therefore, should not be included in the 2015 report cards. There was consensus to remove the results of the evaluations from the 2015 report cards.

Taking up the subcommittee recommendation as amended to approve the format and data on the 2015 district and state report cards, the motion passed with Ms. Marks requesting that she be recorded as voting no. The next vote was to endorse the Profile of the Graduate which was adopted with Ms. Marks requesting that she be recorded as voting no.

Then, Ms. Hairfield presented the communications and public relations plan for the agency as information only. Finally, the February 1 Report was presented and members asked to provide any changes or additions to Dana Yow of the staff in time for its March 1 accountability report to the General Assembly.

Recommendations and Updates

Ms. Barton provided an overview of the results of the EOC's report on the South Carolinas Child Early Reading Development and Education Program and implementation of the Educational Credit for Exceptional Needs Children Program.

There being no further business, the meeting was adjourned.

Partnership for 21st Century Skills

PATTERNS OF INNOVATION

The 21st Century Learning Exemplar Program

21st Century Learning Exemplars

The 21st Century Learning Exemplar Program seeks to identify, document, promote and celebrate examples of successful 21st century learning initiatives, representing thousands of schools, communities and thought leaders across the country who, for the past ten years, have helped to define 21st century skills and promote their adoption.

The Exemplar Program identifies what 21st century educational practices look like and where they are being implemented, providing educators and communities with a variety of models to replicate, and offering policymakers and P21 State Partners local examples to help encourage their support.

With support from the Pearson Foundation, 25 pilot case studies are ongoing. You can see the complete case studies, how they were evaluated, and apply to have your school considered for the Exemplar Program at www.p21.org/Exemplars.

Join us on LinkedIn, Facebook and Twitter (use the #PatternsOfInnovation tag!) to tell us what you think 21st century learning looks like.

Exemplar Schools – Case Studies

A.L. Stanback Middle School, Hillsborough, North Carolina

With a special period devoted to providing all students with structured time for reading practice and academic and extracurricular programs, students are collaborating and develop problem-solving skills.

Bate Middle School, Danville, Kentucky

Educators are using project-based learning, flexible scheduling and a redesigned curriculum to intentionally incorporate critical thinking, problem solving and communication skills.

Benjamin Franklin Elementary, Glen Ellyn School District 41, Illinois

This collaborative and innovative learning community uses project-based and nontraditional instructional strategies.

Carl Wunsche High School, Spring Independent School District, Texas

This unique career academy, located in the Houston-area Spring Independent School District, helps guide students towards their ideal career path.

Carolina Forest International Elementary School, Onslow County, North Carolina

Students get a global education right from the start, focused on developing students' global awareness, collaboration and critical thinking skills.

Dana Elementary School, Hendersonville, North Carolina

A coordinated effort between school leadership and teachers helps students develop problem-solving skills, a collaborative mindset and a goal-oriented approach to learning.

Des Moines North High School, Des Moines, Iowa

Through school-wide improvements and a focus on literacy and communications, they are making enormous strides in its efforts to prepare a diverse student population for success in a rapidly changing world.

Dayton Early College Academy, Dayton, Ohio

With a rigorous approach to college preparation through 21st century curriculum, strong community partnerships and intensive professional development are transforming students' lives.

Farmington Public Schools, Farmington, Connecticut

Students explore career possibilities through mentor programs and hands-on and inquiry-based learning.

Fond du Lac School District, Fond du Lac, Wisconsin

Educators, community members and business partners work together to create new pathways for student success in science, technology, engineering and math careers.

Genesee Community Charter School, Rochester, New York

Real-world learning and citizenship development is emphasized through fieldwork, an inquiry-based approach to academics and an arts-integrated curriculum.

Greenlake School District, Green Lake, Wisconsin

At first glance, the rural community of Green Lake seems an unlikely spot for Wisconsin's first 4K-12 International Baccalaureate program, but this is one of the most dynamic and rigorous academic environments in the state.

Goddard Schools, York County, South Carolina

Preschool students develop the foundation for college and career success and a lifelong love of learning through play.

Highlands High School, Fort Thomas, Kentucky

21st century learning programs at Highland High School that include an extracurricular robotics initiative and a hands-on broadcast journalism course.

Inspired Teaching Demonstration School, Washington, District of Columbia

Students spend school time engaged primarily in activities teach them to think critically, learn and understand information, and solve complex problems.

Kenton County School District, Kentucky

Math and literacy collaborations are used as inquiry-based instructional approaches and academies of innovation were launched to support career and college readiness.

Lancaster High School NAF Academy of Finance, Lancaster, New York

Six, three-year academies are available to students who experience real-world and applied learning, including an internship program and access to advisory board members from corporations, small businesses, colleges and district leadership.

Meadow View Elementary School, Jacksonville, North Carolina

This school is a hub for creativity that integrates arts education into every aspect of the curriculum and uses the arts to help students become 21st century learners.

Savannah High School, Anaheim, California

This school exemplifies a comprehensive approach to 21st century education, with their planning process, career and college pathways program, and professional development practices.

Spirit Lake High School, Spirit Lake, Iowa

This school has instituted a creative, competency-based approach to learning that is helping students develop critical thinking, collaboration and problem-solving skills in an interdisciplinary environment.

Springfield Renaissance School, Springfield Public Schools, Massachusetts

An Expeditionary Learning school where educators emphasize collaboration, self-assessment, communications and problem solving abilities of students.

Walker Elementary School, West-Allis/West-Milwaukee School District, Wisconsin

Exemplifying the District's commitment to next generation, personalized learning environments with multi-age classrooms, one-to-one tablet computing and competency-based progressions.

Wheeling High School, Wheeling, Illinois

Students develop critical thinking, communication and collaboration skills through an extensive program of career pathways and original research opportunities.

Van Meter Community School District, Des Moines, Iowa

Through a standards-based and personalized approach to instruction, students and teachers alike are mastering content and preparing to innovate and excel in a rapidly changing world.

This project is produced by the Partnership for 21st Century Skills with support from the Pearson Foundation, which aims to make a difference by promoting literacy, learning and great teaching. For more resources on teaching 21st century skills, please visit p21.org

PEARSON FOUNDATION

EDUCATION OVERSIGHT COMMITTEE

Subcommittee: Academic Standards Assessment Subcommittee

Date: March 9, 2015

PURPOSE/AUTHORITY

"Section 59 18 350. (A) The State Board of Education, in consultation with the Education Oversight Committee, shall provide for a cyclical review by academic area of the state standards and assessments to ensure that the standards and assessments are maintaining high expectations for learning and teaching. At a minimum, each academic area should be reviewed and updated every seven years. After each academic area is reviewed, a report on the recommended revisions must be presented to the Education Oversight Committee and the State Board of Education for consideration. The previous content standards shall remain in effect until the recommended revisions are adopted pursuant to Section 59 18 355. As a part of the review, a task force of parents, business and industry persons, community leaders, and educators, to include special education teachers, shall examine the standards and assessment system to determine rigor and relevancy.

(B) For the purpose of developing new college and career readiness English/language arts and mathematics state content standards, a cyclical review must be performed pursuant to subsection (A) for English/language arts and mathematics state content standards not developed by the South Carolina Department of Education. The review must begin on or before January 1, 2015, and the new college and career readiness state content standards must be implemented for the 2015 2016 school year.

CRITICAL FACTS

TIMELINE/REVIEW PROCESS

See attached timeline

ECONOMIC IMPACT FOR EOC

Cost:

Fund/Source:

ACTION REQUEST

☒ **For approval** ☐ **For information**

ACTION TAKEN

☐ **Approved** ☐ **Amended**

☐ **Not Approved** ☐ **Action deferred (explain)**

South Carolina Academic Standards for English/Language Arts and Mathematics Review Timeline

Date	Description of Activity
July 10, 2014	Notified Governor and General Assembly of initiation of cyclical review per Act 200. Asked for nominations of individuals to serve on panels to review current standards
July 11, 2014	Launched website for Academic Standards Review Survey (link sent to district superintendents, PIOs, media outlets, ETV, higher education and business contacts)
July 2014	Solicited recommendations for EOC Academic Standards Review Panels from district superintendents, instructional leaders, business/community leaders, higher education contacts, EOC members, State Board members, and TransformSC leadership
August 2014	Selected and notified Academic Standards Review Panel members for EOC
September 30, 2014	Academic Standards Review Survey website closed
October 2, 2014 October 28, 2014 November 6, 2014 November 12, 2014 November 24, 2014	ELA and Math Academic Standards Review Panels reviewed draft standards submitted by SCDE Writing Panels evaluating them for comprehensiveness, rigor, and organization/communication. Resources used during evaluation included current state standards, results of statewide survey of current standards, quality standards from other states, as well as other resources.
December 1, 2014	EOC Evaluation Teams presented standards review and survey results to EOC Academic Standards and Assessments Subcommittee
December 15, 2014	EOC Evaluation Teams presented standards review to full EOC; report and recommendations transmitted to SCDE
January 6, 2015	Representatives from ELA EOC Evaluation Panel and SCDE ELA Writing Team met to revise draft of ELA standards
January 7, 2015 January 13, 2015	Representatives from Math Evaluation Panel and SCDE Math Writing Team met to revise draft of Math standards
January 21, 2015	State Board of Education gave first reading approval to new ELA standards.
February 11, 2015	State Board of Education gave first reading approval to new math standards.
February 12, 2015	CHE Advisory Committee on Academic Programs to receive standards from SCDE. Group to determine college- and career-readiness of standards
March 2, 2015	ASA approves new ELA and Math standards and addenda
March 9, 2015	EOC to meet to consider approval of new ELA and Math standards and addenda
March 11, 2015	Anticipated State Board of Education second reading consideration of new standards

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Content Standards answer the question:

What knowledge, concepts and skills should our students acquire at each grade level?

Content standards are critical for making sure that teachers know what is to be taught; children know what is to be learned; and parents and the public can determine how well the concepts are being learned.

The following table compares the 2007 South Carolina Mathematics Standards and the 2008 South Carolina English Language Arts (ELA) Standards with the Common Core State Standards (CCSS) in ELA and Math using the *Common Core State Standards Initiative Comparative Review Report,*[i] which was published in 2010. A comparison of the two sets of standards resulted in a report on the alignment between the two sets of standards. A content-to-content review was done as well as examination of rigor. Although "in many cases, the CCSS exceeded the rigor of the current SC standards,[ii]" the report only reported the percentage of CCSS standards that *met or exceeded* the rigor of 2008 standards.

Comparison of 2008 SC ELA Standards and Common Core Standards in ELA	
Alignment of **Content** among all grade levels:	**98%**
*Alignment of **Cognitive Level** among all grade levels:	**94%**

*The CCSS were equivalent to or exceeded the demand of the 2008 ELA standards.

Comparison of 2007 SC Math Standards and Common Core Standards in Math	
Alignment of **Content** among all grade levels:	**97%**
*Alignment of **Cognitive Level** among all grade levels:	**87%**

*The CCSS were equivalent to or exceeded the demand of the 2007 Math standards.

Weaknesses of SC 2008 ELA and 2007 Math standards from *Fordham Institute*:

ELA – "woefully vague and repetitive, despite some good content." (Fordham Grade: D)

Math – "the standards neither prioritize nor support the arithmetic skills that students need and therefore fail to provide the guidance K-12 teachers need to truly prepare students for college mathematics." (Fordham Grade: C)

Total Number of Standards

Math		
2007 Math Standards	CCSS- Math	SCCCR – Math
611	**502**	**403**

ELA		
2008 ELA Standards and Indicators	CCSS- ELA Anchor Standards and Standards	SCCCR – ELA Standards and Indicators
666	**542**	**504**

The following table compares the Common Core State Standards (CCSS) in ELA and Math and the current SC College and Career-Ready (SCCCR) ELA and Math standards, which have received first reading approval from the SC State Board of Education. The alignment comparisons of content and rigor were done by the staff of the EOC using the complete, original text of each set of standards. Professional judgment was used in doing the analyses and the results have not been independently verified.

Comparison of Common Core Standards in ELA and SC College and Career-Ready (SCCCR) ELA Standards	
Alignment of **Content** among all grade levels:	**89%**
Percent of SCCCR ELA Standards that ***meet or exceed*** the demands of CCSS	**100%**
*Percent of SCCCR ELA Standards that ***exceed*** the demands of CCSS	**18%**

*determined by *Revised Bloom's* Taxonomy structure and/or demand of standard.

Comparison of Common Core Standards in Math and SC College and Career-Ready (SCCCR) Math Standards	
Alignment of **Content** among all grade levels:	**92%**
Percent of SCCCR Math Standards that ***meet or exceed*** the demands of CCSS	**100%**
*Percent of SCCCR Math Standards that ***exceed*** the demands of CCSS	**15%**

*determined by *Revised Blooms* Taxonomy structure and/or demand of standard.

SCCCR Standards in Math:

- Greater emphasis on number fluency in K and 1st grade
- Inclusion of instruction in coins & money in grades 1 and 4.
- Inclusion of fluency in multiplication tables in grade 4.
- Greater emphasis on data and measurement in elementary grades.
- Greater skill progression from middle to high school.
- Greater emphasis on data analysis
- Inclusion of graduation standards that all students (college and career) should meet
- In grades 9-12, standards identified by course and not grade spans as in CCSS
- Inclusion of Precalculus and calculus courses in HS.

SCCCR Standards in English Language Arts:

- Inclusion of cursive writing in grades 2 and 3.
- Principles of Reading included as standards within each grade band.
- Inquiry-based Literacy Standards included within each grade band.
- Appendixes of CCSS removed from standards, which includes text exemplars.
- Standards often exceed the demands of CCSS, particularly in the early grades.

[i] Common Core State Standards Initiative Comparative Review Report (2010) http://www.eoc.sc.gov/Reports%20%20Publications/Current%20Reports%202008-14/Standards/CCSSReportFINAL0604.pdf

SOUTH CAROLINA
STATE DEPARTMENT
OF EDUCATION

Proposed Addendum to the First Reading State Board of Education Approved *South Carolina College- and Career-Ready Standards for English Language Arts 2015*

The items in the categories listed below were noted following First Reading Approval by the State Board of Education on January 21, 2015:

Typographical or Scrivener's Errors

Grade 2 Reading Literary Text (Language, Craft, and Structure)
Standard 10 Indicator10.6 p. 19
~~Acquire and~~ Use general academic and domain-specific words and phrases acquired through talk and text; explore nuances of words and phrases.

Grades 9-12 Reading Informational Text (Language, Craft, and Structure)
Standard 9 Indicator 9.6 p. 95
~~*9.6 Students are expected to build upon and continue applying concepts learned previously.*~~
~~***Grade 5** Determine the meaning of an unknown word using knowledge of base words and Greek and Latin affixes.*~~

Grade 1 Writing (Range and Complexity)
Standard 6 Indicator 6.1 p. 29
~~With guidance and support,~~ Write routinely and persevere in writing tasks for a variety of purposes and audiences.

Grade 2 Writing (Meaning, Context, and Craft)
Standard 1 Indicator 1.1 p. 26
Explore print and multimedia sources to write opinion pieces that introduce the topic ~~or text,~~ state an opinion and supply reasons that support the opinion, use transitional words to connect opinions and reasons, and provide a concluding statement or section.

Disciplinary Literacy: Immersion in the language and thinking processes ~~valued~~ by each discipline guides students to develop and cultivate a deeper understanding of particular disciplines. (p. 8, 33, 56, 80, 112)

Formatting or Organizational Errors

Grade 6-12 Reading Informational Text (Principles of Reading)
Standard 4 Indicators 4.1-4.3 p. 66-67 (Replace with text below.)

4.1 Students are expected to build upon and continue applying previous learning. ***Grade 2** Read grade-level text with purpose and understanding.*
4.2 Students are expected to build upon and continue applying previous learning. ***Grade 4** Read grade-level prose and poetry orally with accuracy, appropriate rate, expression, intonation, and phrasing on successive readings.*
4.3 Students are expected to build upon and continue applying previous learning.

Grade 1 *Use context to confirm or self-correct word recognition and understanding, rereading as necessary.*

Grades 9-12 Reading Informational Text (Range and Complexity)
Standard 12 Indicator 12.1 p. 97

12.1 Engage in whole and small group reading with purpose and understanding. ~~through teacher modeling and gradual release of responsibility.~~	12.1 Engage in whole and small group reading with purpose and understanding. ~~through teacher modeling and gradual release of responsibility.~~	12.1 Engage in whole and small group reading with purpose and understanding. ~~through teacher modeling and gradual release of responsibility.~~	12.1 Engage in whole and small group reading with purpose and understanding. ~~through teacher modeling and gradual release of responsibility.~~

Insertion of Language to Provide Additional Specificity for Instruction and Assessment

Grades 3 – 5 Inquiry
Standard 5 Indicator 5.3 p. 36

~~Assess the process to revise, plan, and determine strategies to apply learning for future inquiry.~~ 5.3 Assess the process and determine strategies to revise the plan and apply learning for future inquiry.	~~Assess the process to revise, plan, and determine strategies to apply learning for future inquiry~~ 5.3 Assess the process and determine strategies to revise the plan and apply learning for future inquiry.	~~Assess the process to revise, plan, and determine strategies to apply learning for future inquiry.~~ 5.3 Assess the process and determine strategies to revise the plan and apply learning for future inquiry.

Grade 9-12 Inquiry
Standard 3 Indicator 3.2 p. 82

3.2 Examine historical, social, cultural, or political context to broaden inquiry and create questions.	3.2 Examine historical, social, cultural, or political context to broaden inquiry and create questions.	3.2 Examine historical, social, cultural, or political context to broaden inquiry and create questions.	3.2 Examine historical, social, cultural, or political context to broaden inquiry and create questions.

Grades 3 and 4 Reading Literary Text (Language, Craft, and Structure)
Standard 9 p. 39

9.1 Identify and explain how the author uses idioms, metaphor, ~~imagery,~~ or personification, ~~hyperbole, and~~ to shape meaning and style.	9.1 Identify and explain how the author uses ~~idioms,~~ imagery, hyperbole, adages, ~~and~~ or proverbs to shape meaning and tone.

Grade 7-8 Reading Literary Text (Language, Craft, and Structure)
Standard 10 Indicator 10.1 p.63

10.1 Use the overall meaning of a text or a word's position or function to determine the meaning of a word or phrase.	~~*10.1 Students are expected to build upon and continue applying previous learning.*~~ Use context clues to determine meanings of words and phrases.	Use context clues to determine meanings of words and phrases.

Grade 6-8 Reading Literary Text (Language, Craft, and Structure)
Standard 10 Indicator 10.4 p.63 (This needs to be inserted in gray boxes.)
10.4 Students are expected to build upon and continue applying previous learning.
Grade 2 *Use the meanings of individual words to predict the meaning of compound words.*

Grade 8 Reading Literary Text (Language, Craft, and Structure)
Standard 11 Indicator 11.1 p.65
11.1 Analyze how the author's development of ~~the differences in points of view~~ perspectives between the characters and the reader create suspense or humor.

Grade 9-12Reading Literary Text (Language, Craft, and Structure)
Standard 10 Indicator 10.4 p.89 (This needs to be inserted in gray boxes.)
10.4 Students are expected to build upon and continue applying previous learning.
Grade 2 *Use the meanings of individual words to predict the meaning of compound words.*

Grade 9-10 Reading Literary Text (Meaning and Context)
Standard 8 Indicator 8.1 p. 88

8.1 ~~Analyze how a series of ideas or events is introduced, developed, connected, and ordered within a particular context.~~ Analyze how characters or a series of ideas or events is introduced, connected, and developed within a particular context.	8.1 ~~Analyze how a series of ideas or events is introduced, developed, connected, and ordered within a particular context.~~ Analyze how characters or a series of ideas or events is introduced, connected, and developed within a particular context.	8.1 Analyze a complex set of ideas or sequence of events and explain how specific characters, ideas, or events develop and interact within a particular context.	8.1 Analyze a complex set of ideas or sequence of events and explain how specific characters, ideas, or events develop and interact within a particular context.

Grade 9-10 Reading Literary Text (Language, Craft, and Structure)
Standard 11 Indicator 11.1 p. 89

11.1 ~~1 Analyze how point of view and author's perspective and purpose shape content, meaning, and style.~~ Analyze and provide evidence of how the author's choice of point of view, perspective, and purpose shape content, meaning, and style.	11.1 ~~Analyze how point of view and author's perspective and purpose shape content, meaning, and style.~~ Analyze and provide evidence of how the author's choice of point of view, perspective, and purpose shape content, meaning, and style.	11.1 Analyze how point of view and author's perspective and purpose shape content, meaning, and style, supports rhetorical or aesthetic purposes, and conveys cultural experience.	11.1 Analyze how point of view and author's perspective and purpose shape content, meaning, and style; supports rhetorical or aesthetic purposes; and conveys cultural experience.

Grade 9- Reading Literary Text (Language, Craft, and Structure)
Standard 12 Indicator 12.1 p.90

12.1 Determine the significance of the author's use of text structure and plot organization to create ~~mood or effect~~ the effects of mystery, tension, or surprise-citing support from the text.

Grade 9-12 Reading Literary Text (Language, Craft, and Structure)
Standard 10 Indicator 10.1 p. 89

~~*10.1 Students are expected to build upon and continue applying previous learning.*~~ ~~***Grade 6*** *Determine the meaning of a word or phrase using the overall meaning of a text or a word's position or function.*~~ 10.1 Use context clues to determine meanings of words and phrases.	10.1 Use context clues to determine meanings of words and phrases.	10.1 Use context clues to determine meanings of words and phrases.	10.1 Use context clues to determine meanings of words and phrases.

Grade 7-8 Reading Informational Text (Language, Craft, and Structure)
Standard 9 Indicator 9.1 p.68

9.1 Determine the meaning of a word or phrase using the overall meaning of a text or a word's position or function.	~~*9.1 Students are expected to build upon and continue applying previous learning.*~~ Use context clues to determine meanings of words and phrases.	~~*9.1 Students are expected to build upon and continue applying previous learning.*~~ Use context clues to determine meanings of words and phrases.

Grade 9-12 Reading Informational Text (Language, Craft, and Structure)
Standard 9 Indicator 9.1 p. 94

~~*9.1 Students are expected to build upon and continue applying previous learning.*~~ ~~***Grade 6*** *Determine the meaning of a word or phrase using the overall meaning of a text or a word's position or function.*~~ Use context clues to determine meanings of words and phrases.	Use context clues to determine meanings of words and phrases.	Use context clues to determine meanings of words and phrases.	Use context clues to determine meanings of words and phrases.

These proposed additions are made to the actual indicators for all three standards in order to provide assessment opportunities per Office of Assessment.

Grades K – 2 Writing (Meaning, Context, and Craft)
Standards 1, 2, and 3; Indicators 1.2, 2.2, and 3.2 p. 26-27

With guidance and support, plan, revise, and edit building on personal ideas and the ideas of others to strengthen writing.	Plan, revise, and edit building on personal ideas and the ideas of others to strengthen writing.	Plan, revise, and edit, focusing on a topic while building on personal ideas and the ideas of others to strengthen writing.

Grades 3-5 Writing (Meaning, Context, and Craft)
Standard 1 Indicators 1.1 e p.47-48

1.1 Write opinion pieces that: e. develop and strengthen writing as needed by planning, revising, and editing building on personal ideas and the ideas of others;	1.2 Write opinion pieces that: e. develop and strengthen writing as needed by planning, revising, and editing building on personal ideas and the ideas of others;	1.1 Write arguments that: e. develop and strengthen writing as needed by planning, revising, editing, rewriting;

Grades 3-5 Writing (Meaning, Context, and Craft)
Standard 2 Indicators 2.1 e and 2.1 f and 2.1 h p.48

2.1 Write informative/explanatory texts that: e. develop and strengthen writing as needed by planning, revising, and editing building on personal ideas and the ideas of others;	2.1 Write informative/explanatory texts that: f. develop and strengthen writing as needed by planning, revising, and editing building on personal ideas and the ideas of others;	2.1 Write informative/explanatory texts that: h. develop and strengthen writing as needed by planning, revising, and editing building on personal ideas and the ideas of others;

Grades 3-5 Writing (Meaning, Context, and Craft)
Standard 3 Indicators 3.1 e p.50

3.1 Gather ideas from texts, multimedia, and personal experience to write narratives that: e. develop and strengthen writing as needed by planning, revising, and editing building on personal ideas and the ideas of others;	3.1 Gather ideas from texts, multimedia, and personal experience to write narratives that: e. develop and strengthen writing as needed by planning, revising, and editing building on personal ideas and the ideas of others;	3.1 Gather ideas from texts, multimedia, and personal experience to write narratives that: e. develop and strengthen writing as needed by planning, revising, and editing building on personal ideas and the ideas of others;

Grade 6-8 Writing (Meaning, Context, and Craft)
Standard 1 Indicators 1.1e, 1.1f, 1.1f p. 71

1.1 Write arguments that: e. develop and strengthen writing as needed by planning, revising, editing, rewriting;	1.1 Write arguments that: f. develop and strengthen writing as needed by planning, revising, editing, rewriting;	1.1 Write arguments that: f. develop and strengthen writing as needed by planning, revising, editing, rewriting;

Grade 6-8 Writing (Meaning, Context, and Craft)
Standard 2 Indicators 2.1g, 2.1g, 2.1g p. 71

2.1 Write informative/explanatory texts that: g. develop and strengthen writing as needed by planning, revising, editing, rewriting;	2.1 Write informative/explanatory texts that: g. develop and strengthen writing as needed by planning, revising, editing, rewriting;	2.1 Write informative/explanatory texts that: g. develop and strengthen writing as needed by planning, revising, editing, rewriting;

Grade 6-8 Writing (Meaning, Context, and Craft)
Standard 3 Indicators 3.1f, 3.1f, 3.1f p. 73

3.1 Gather ideas from texts, multimedia, and personal experience to write narratives that: f. develop and strengthen writing as needed by planning, revising, and editing building on personal ideas and the ideas of others;	3.1 Gather ideas from texts, multimedia, and personal experience to write narratives that: f. develop and strengthen writing as needed by planning, revising, and editing building on personal ideas and the ideas of others;	3.1 Gather ideas from texts, multimedia, and personal experience to write narratives that f. develop and strengthen writing as needed by planning, revising, and editing building on personal ideas and the ideas of others;

Grade 9-12 Writing (Meaning, Context, and Craft)

Standard 1 Indicator 1.1f, 1.1f, 1.1h, 1.1h p. 99-100 (argumentative)

Standard 2 Indicator 2.1h p.101 (informational/expository)

Standard 3 Indicators 3.1e, 3.1e, 3.1f, 3.1e p. 103 (narrative)

develop and strengthen writing as needed by planning, revising, editing, rewriting;	develop and strengthen writing as needed by planning, revising, editing, rewriting;	develop and strengthen writing as needed by planning, revising, editing, rewriting;	develop and strengthen writing as needed by planning, revising, editing, rewriting;

Other

Add Principles of Reading under Key Ideas under (RL) and (RI)	The Key Ideas in (**RL**) and (**RI**) are: Meaning and Context	Language, Craft, and Structure	Range and Complexity In (**W**), the Key Ideas are: Meaning, Context, and Craft	Language	Range and Complexity

This needs to be reflected in the graphic on page 11.

Need to add in Profile of the SC Graduate and Joint Team Members

South Carolina
College- and Career-Ready Standards for English Language Arts

South Carolina
State Department of Education
Columbia, South Carolina
2015

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Introduction

The *South Carolina College- and Career-Ready Standards for English Language Arts (ELA) 2015* are the result of a process designed to identify, evaluate, synthesize, and create the most high-quality, rigorous standards for South Carolina's students. The standards are designed to ensure that South Carolina students are prepared to enter and succeed in economically viable career opportunities or postsecondary education and ensuing careers.

Standards Process

These standards were created through a collaborative process by a writing team selected from applications submitted by interested educators consisting of current and retired South Carolina classroom teachers, instructional coaches, district leaders, higher education faculty members, and educators who specialize in working with English Language Learners, special education, career and technology education, and assessment. The purpose of the standards process was to design college- and career-ready standards that would ensure that students who complete high school in South Carolina are ready for college and careers. The process was designed to identify or create the clearest, most rigorous, and best-aligned ELA standards.

History

Act 200, ratified on June 6, 2014, required the SCDE to facilitate the process of developing new high quality, college- and career-ready standards for implementation during the 2015-16 school year. During the fall of 2014, the SCDE convened an ELA Writing Team comprised of K-12 educators and representatives from higher education. The writing of the draft standards, keeping the needs of South Carolina students and educators in mind, began with the review of a number of resources, which included the 2014 ACT College and Career Readiness Standards; the Common Core State Standards for English Language Arts (CCSS); college- and career-ready standards from other states including Indiana, Nebraska, and Texas; the *South Carolina Academic Standards for English Language Arts 2008* which reference the 2001 Massachusetts standards*;* test specifications for the SAT; and the National Council of Teachers of English (NCTE)/ International Reading Association (IRA) Standards.

The ELA Writing Team then conceptualized what students who graduate from South Carolina's public education system should demonstrate. This document, *South Carolina Portrait of a College- and Career-Ready English Language Arts Student, [see page 10]* served as the foundation and compass that guided the Writing Team's determination of the components of these draft standards.

Using the portrait as a "touchstone," the K-12 strands of Inquiry-Based Literacy, Reading-Literary Text, Reading-Informational Text, Writing, and Communication were crafted. Each strand consists of standards, which contain the same language for kindergarten through high school; grade level or course specificity is provided by indicators. A graphic representation of the organizational structure is presented on page 11.

The document also explains the *South Carolina Innovations*: Inquiry-Based Literacy Standards; Disciplinary Literacy; and the Fundamentals of Reading, Writing, and Communication. These serve as underpinnings of what must be in place in classrooms for students to become proficient readers, writers, and communicators regardless of grade level. Disciplinary Literacy and the Fundamentals of Reading, Writing, and Communication **are not standards**, therefore, they **are not assessed**; however, they are **essential for successful implementation** of the new standards and are a critical component of the document. Each is explained in detail on subsequent pages.

Public Comment and Review Period

The draft college-and career-ready standards were posted online for public review on November 6, 2014. The public was invited to provide comment via an online survey until November 30, 2014. Over 2200 public review surveys were submitted. Simultaneously, the SCDE convened a Task Force, consisting of parents, business and community leaders, higher education professionals, and special education teachers, which also provided written feedback.

The Education Oversight Committee (EOC) convened a review panel of 25 educators, business and community members, and higher education faculty to review the draft standards. The EOC review panel submitted a report to the SCDE, which included recommendations for revisions to the draft standards. The standards writing process continued as the comments from the online public review survey, the SCDE Task Force, and the EOC Review Panel were compiled, reviewed, and used by the Writing Team to make revisions and edits to the draft standards.

A joint meeting was held with representatives from the SCDE Writing Team, the EOC Review Panel, higher education, the business community, and the State Board of Education (SBE) to further discuss the implementation of the recommendations. Further revisions were made to the draft document as a result of this meeting.

Reconvening of the Writing Team

The ELA Writing Team reconvened on December 1, 2014, and was tasked with incorporating feedback from all sources to revise and edit the draft standards ensuring they were aligned across grade levels and showed appropriate progression from grade to grade. The Writing Team was also tasked with editing and revising standards for clarity, elimination of wordiness, and any other significant public comments or factors. The revised draft standards were then submitted to Senior Staff at the SCDE and the SBE for approval.

Support Documents

In order to ensure the appropriate understanding and effective implementation of the *South Carolina College- and Career Ready English Language Arts Standards 2015*, support documents will be developed. Initial components of the support documents will include a glossary, vertical articulation documents, Depth of Knowledge (DOK) and Bloom's levels, and a correlation/crosswalk document. Additional support documents will be developed as needed.

South Carolina Innovations

The following research-based practices and processes serve as the underpinnings of what must be in place in classrooms for students to become proficient readers, writers, and communicators. These components are essential for successful implementation of the new South Carolina standards. These essential practices and processes contain the same language for each grade level or course due to their universal nature. They are included within the text of this document to illuminate the connection between these practices and the standards. Support documents and professional development will be provided to further support educators' understanding.

Inquiry-Based Literacy Standards

The Inquiry-Based Literacy Standards support teachers in structuring a classroom environment in which students can routinely and systematically engage in the process of inquiry. Students individually and collaboratively engage and interact with content to become curious, self-regulated, reflective learners. The Inquiry-Based Literacy Standards should be infused within and across all content areas and disciplines and are the responsibility of the entire school community. These standards work in concert with Disciplinary Literacy and should be viewed as a system or structure which supports student learning rather than being perceived as steps which lead to the development of a one-time research paper or project.

The Inquiry-Based Literacy Standards are listed below and are also included in each grade band or course standards section:

- **Formulate relevant, self-generated questions based on interests and/or needs that can be investigated.**
- **Transact with texts to formulate questions, propose explanations, and consider alternative views and multiple perspectives.**
- **Construct knowledge, applying disciplinary concepts and tools, to build deeper understanding of the world through exploration, collaboration, and analysis.**
- **Synthesize integrated information to share learning and/or take action.**
- **Reflect throughout the inquiry process to assess metacognition, broaden understanding, and guide actions, both individually and collaboratively.**

Additional information and elaboration of the Inquiry-Based Literacy Standards will be included in a support document.

Disciplinary Literacy

Reading, writing, communicating, thinking critically, and performing in meaningful, relevant ways within and across disciplines are essential practices for accessing and deeply understanding content. Immersion in the language and thinking processes valued by each discipline guides students to develop and cultivate a deeper understanding of particular disciplines.

College- and career-ready students must be able to expertly navigate curriculum, paying close attention to practices unique to a particular discipline. Disciplinary Literacy works in concert with Inquiry-Based Literacy Standards to prepare students for the demands of the 21st century. These practices also offer opportunities for students to demonstrate their understanding of the content in traditional and non-traditional ways.

The *South Carolina College- and Career-Ready Standards for English Language Arts 2015* include the Disciplinary Literacy practices listed below:

- **Read, write, and communicate using knowledge of a particular discipline.**
- **Integrate the Reading, Writing, and Communication Standards and the Inquiry-Based Literacy Standards to communicate and create understanding within content areas.**
- **Extend and deepen understanding of content through purposeful, authentic, real-world tasks to show understanding and integration of content within and across disciplines.**

Additional information and elaboration for Disciplinary Literacy will be included in a support document.

Fundamentals of Reading, Writing, and Communication

The Fundamentals of Reading, Writing, and Communication delineate the underlying assumptions of the processes students must use and integrate to become successful and proficient readers, writers, and communicators, regardless of their grade level or course placement. Through these processes, students apply strategies as they read, write, and communicate. As students use these processes with automaticity, they more successfully navigate new and more challenging content and tasks.

Teachers at all grade levels and in all disciplines should refer to the Fundamentals when determining what students use or neglect as they read, write, and communicate. Engagement increases as students take ownership of their learning through personal understanding and implementation of the reading, writing, and communication processes.

The Fundamentals for each strand, **while not assessed,** are an integral part of the *South Carolina College- and Career-Ready English Language Arts Standards 2015* and are listed below, as well as at the beginning of each grade band or course section.

Fundamentals of Reading

- **Integrate an information (cueing) system that includes meaning (semantics), structure (syntax), visual (graphophonic), and pragmatics (schematic) to make meaning from text.**
- **Gain understanding by applying reading strategies of monitoring, searching, confirming, cross-checking, rereading, and self-correcting.**
- **Employ comprehension strategies before, during, and after reading text using schema, annotating, questioning, visualizing, drawing inferences, determining importance, summarizing, and synthesizing.**
- **Use metacognition to monitor meaning and adjust strategies while reading.**
- **Notice and analyze an author's style and techniques to construct meaning.**

Fundamentals of Writing

- **Employ a recursive writing process that includes planning, drafting, revising, editing, rewriting, publishing, and reflecting.**
- **Produce writing in which the development, organization, and style are appropriate to task, purpose, discipline, and audience.**
- **Use clear and coherent written language to accomplish a purpose such as learning, enjoyment, argument, and the exchange of information.**
- **Monitor progress throughout the writing process and adjust strategies as needed from independence to collaboration within a writing community.**
- **Incorporate authors' craft techniques observed from wide reading of anchor and mentor texts across disciplines to inform, explain, convince/argue, and entertain.**

Fundamentals of Communication

- **Employ a reciprocal communication process that includes planning, drafting, revising, editing, reviewing, presenting, and reflecting.**
- **Communicate using style, language, and nonverbal cues appropriate to task, purpose, and audience.**
- **Use active and attentive communication skills, building on other's ideas to explore, learn, enjoy, argue, and exchange information.**
- **Monitor delivery and reception throughout the communication process and adjust approach and strategies as needed.**
- **Adjust speech, using standard English when indicated or appropriate, in a variety of contexts and tasks for presenting or participating in the social exchange of ideas.**
- **Acquire vocabulary from multiple forms of communication; use newly acquired vocabulary to appropriately communicate in a variety of situations and contexts.**

Additional information and elaboration of the Fundamentals will be included in a support document.

South Carolina Portrait of a College- and Career-Ready English Language Arts Student

A South Carolina student who is College- and Career-Ready in English Language Arts will demonstrate:

- **Academic Success and Employability:** Student demonstrates the ability to analyze deep content and construct conceptual knowledge through strategic and appropriate academic and technical skills and tools to complete tasks and solve problems in real world situations.

- **Interdependent Thinking and Collaborative Spirit:** Student develops and applies interpersonal skills through listening, speaking, writing, and reading in order to respect diversity and seek an understanding of varied perspectives. Student works collaboratively to achieve goals, solve problems, and foster innovation.

- **Intellectual Integrity and Curiosity:** Student demonstrates intellectual integrity in the ethical selection and application of resources. Student discerningly assimilates, synthesizes, and verifies research while citing relevant sources and evaluating evidence.

- **Logical Reasoning:** Student appropriately employs a variety of strategies to discern the meaning of increasingly complex texts and other modes of communication to form logical, evidence-based conclusions.

- **Self-Reliance and Autonomy:** Student demonstrates qualities of an independent, reflective learner and contributor to varied societies through self-reliance, self-improvement, constructive interactions with others, and perseverance of life-long learning.

- **Effective Communication**: Student fluently and appropriately uses various modes of communication for authentic purposes based on audience, task, and discipline.

Graphic Representation of the Organizational Structure

Reading – Literary Text

Expectations for Teaching and Learning
Learning should be modeled, supported, and reflect gradual release of responsibility at all levels.
Teachers should continue to address earlier standards as they apply to more complex text.
Students are expected to build upon and continue applying concepts learned previously.

By the end of second grade, students read four major types of literary texts: fiction, literary nonfiction, poetry, and drama. In the category fiction, they read the following specific types of texts: historical fiction, contemporary realistic fiction, picture books, folktales, fables, tall tales, and fantasy. In the category of literary nonfiction, they read autobiographical and biographical sketches. In the category of poetry, they read narrative, lyrical, and humorous poems and free verse.

Meaning and Context

Standard 1: Determine meaning and develop logical interpretations by making predictions, inferring, drawing conclusions, analyzing, synthesizing, providing evidence, and investigating multiple interpretations.

KINDERGARTEN	GRADE ONE	GRADE TWO
1.1 With guidance and support, ask and answer who, what, when, where, why, and how questions about a text; refer to key details to make inferences and draw conclusions in texts heard or read.	1.1 Ask and answer who, what, when, where, why, and how questions to demonstrate understanding of a text; use key details to make inferences and draw conclusions in texts heard or read.	1.1 Ask and answer literal and inferential questions to demonstrate understanding of a text; use specific details to make inferences and draw conclusions in texts heard or read.
1.2 With guidance and support, ask and answer questions to make predictions using prior knowledge, pictures, illustrations, title, and information about author and illustrator.	1.2 Make predictions using prior knowledge, pictures, illustrations, title, and information about author and illustrator.	1.2 Make predictions before and during reading; confirm or modify thinking.

Standard 2: Summarize key details and ideas to support analysis of thematic development.

2.1 Describe the relationship between illustrations and the text in which they appear.	2.1 Describe the relationship between the illustrations and the characters, setting or events.	2.1 Use information gained from illustrations and words in a print or multimedia text to demonstrate understanding of its characters, setting, or plot.

Teaching in South Carolina is based on four major components: standards, curriculum, instruction, and assessment. Standards are year-end goals for student learning which inform and guide curriculum development, instructional practices, and assessment. Curriculum is developed based on standards. Instruction is the support teachers offer to navigate the curriculum that is also based on the standards. Formal and informal assessment, based on standards, guides and informs instruction.

Strands

The *South Carolina College- and Career-Ready Standards for ELA 2015* include the following **Strands:**

Inquiry-Based Literacy **(I)**
Reading – Literary Text (**RL**)
Reading – Informational Text (**RI**)
Writing (**W**)
Communication (**C**)

Each **Strand,** except Inquiry-Based Literacy, is supported by the **Key Ideas** listed below.

The Key Ideas in (**RL**) and (**RI**) are:

Meaning and Context | Language, Craft, and Structure | Range and Complexity

In (**W**), the Key Ideas are:

Meaning, Context, and Craft | Language | Range and Complexity

In (**C**), the Key Ideas are:

Meaning and Context | Language, Craft, and Structure

Standards

Each **Key Idea** is supported by one or more **Standards**. The **Standards** included in this document represent the culminating outcome which describes what students should know and be able to do when they leave our public school system; therefore, the language included in each **Standard** in the same for Kindergarten through English 4.

Indicators

Each **Standard** is supported by **Indicators** which provide specific outcomes for each grade level or course.

Kindergarten through Grade Two
Standards and Indicators

Inquiry-Based Literacy Standards (I)

Standard 1: Formulate relevant, self-generated questions based on interests and/or needs that can be investigated.

KINDERGARTEN	GRADE ONE	GRADE TWO
1.1 Engage in daily opportunities for play and exploration to foster a sense of curiosity, develop the disposition of inquisitiveness, and begin to verbally articulate "I wonders" about ideas of interest.	1.1 Translate "wonderings" into questions that-lead to group conversations, explorations, and investigations.	1.1 Ask self-generated questions that lead to group conversations, explorations, and investigations.

Standard 2: Transact with texts to formulate questions, propose explanations, and consider alternative views and multiple perspectives.

2.1 With guidance and support, engage in daily explorations of texts to make connections to personal experiences, other texts, and the environment.	2.1 Engage in daily explorations of texts to make connections to personal experiences, other texts, and the environment.	2.1 Engage in daily exploration to formulate questions from texts and personal experiences; generate possible explanations and consider alternatives.

Standard 3: Construct knowledge, applying disciplinary concepts and tools, to build deeper understanding of the world through exploration, collaboration, and analysis.

3.1 With guidance and support, develop a plan of action for collecting information from multiple sources through play, sensory observation, texts, websites, and conversations with adults/peers.	3.1 Develop a plan of action for collecting relevant information from multiple sources through play, sensory observation, texts, websites, and conversations with adults/peers.	3.1 Develop a plan of action for collecting relevant information from multiple sources through play, observation, texts, websites, and conversations with adults/peers.
3.2 With guidance and support, select information, revise ideas, and record and communicate findings.	3.2 Select the most important information, revise ideas, and record and communicate findings.	3.2 Select the most important information, revise ideas, and record and communicate findings.

Standard 4: Synthesize information to share learning and/or take action.

4.1 With guidance and support, discover relationships and patterns during the inquiry process.	4.1 Draw conclusions from relationships and patterns discovered during the inquiry process.	4.1 Interpret relationships and patterns discovered during the inquiry process.
4.2 With guidance and support, use tools to communicate findings.	4.2 Determine appropriate tools to communicate findings.	4.2 Use appropriate tools to communicate findings and/or take informed action.
4.3 With guidance and support, reflect on findings.	4.3 Reflect on findings and take action.	4.3 Reflect on findings and pose new questions for further inquiry.

Standard 5: Reflect throughout the inquiry process to assess metacognition, broaden understanding, and guide actions, individually and collaboratively.

5.1 With guidance and support, recognize the value of individual and collective thinking.	5.1 Recognize the value of individual and collective thinking.	5.1 Acknowledge and value individual and collective thinking.
5.2 With guidance and support monitor and assess learning to guide inquiry	5.2 Monitor and assess learning to guide inquiry.	5.2 Monitor and assess learning to guide inquiry.
This indicator does not begin until Grade 1.	5.3 Articulate the thinking process.	5.3 Articulate the process of learning and seek appropriate help.

Reading – Literary Text (RL)

Expectations for Teaching and Learning
Learning should be modeled, supported, and reflect gradual release of responsibility at all levels.
Teachers should continue to address earlier standards as they apply to more complex text.
Students are expected to build upon and continue applying concepts learned previously.

By the end of second grade, students read four major types of literary texts in print and multimedia formats: fiction, literary nonfiction, poetry, and drama. In the category of fiction, they read the following specific types of texts: historical fiction, contemporary realistic fiction, picture books, folktales, fables, tall tales, and fantasy. In the category of literary nonfiction, they read autobiographical and biographical sketches. In the category of poetry, they read narrative, lyrical, and humorous poems and free verse.

Fundamentals of Reading

- Integrate an information (cueing) system that includes meaning (semantics), structure (syntax), visual (graphophonic), and pragmatics (schematic) to make meaning from text.
- Gain understanding by applying reading strategies of monitoring, searching, confirming, cross-checking, rereading, and self-correcting.
- Employ comprehension strategies before, during, and after reading text using schema, annotating, questioning, visualizing, drawing inferences, determining importance, summarizing, and synthesizing.
- Use metacognition to monitor meaning and adjust strategies while reading.
- Notice and analyze the styles and techniques authors use to help readers construct meaning.

Principles of Reading (P)

Standard 1: Demonstrate understanding of the organization and basic features of print.

KINDERGARTEN	GRADE ONE	GRADE TWO
1.1 Follow words from left to right, top to bottom, and front to back.	1.1 Recognize the distinguishing features of a sentence.	*1.1 Students are expected to build upon and continue applying previous learning.*
1.2 Recognize that spoken words are represented in written language by specific sequences of letters.	*1.2 Students are expected to build upon and continue applying previous learning.*	
1.3 Understand that words are separated by spaces in print.	*1.3 Students are expected to build upon and continue applying previous learning.*	
1.4 Recognize and name all upper- and lowercase letters of the alphabet.	*1.4 Students are expected to build upon and continue applying previous learning.*	

Standard 2: Demonstrate understanding of spoken words, syllables, and sounds.

2.1 Recognize and produce rhyming words.	2.1 Distinguish long from short vowel sounds in spoken single-syllable words.	*2.1 Students are expected to build upon and continue applying previous learning.*
2.2 Count, pronounce, blend, and segment syllables in spoken words.	2.2 Orally produce single-syllable words by blending sounds, including consonant blends in spoken words.	*2.2 Students are expected to build upon and continue applying previous learning.*
2.3 Blend and segment onsets and rimes of single-syllable spoken words.	2.3 Isolate and pronounce initial, medial, and final sounds in spoken single-syllable words.	*2.3 Students are expected to build upon and continue applying previous learning.*
2.4 Isolate and pronounce the initial, medial, and final sounds in a three-phoneme word.	2.4 Segment spoken single-syllable words into their complete sequence of individual sounds.	*2.4 Students are expected to build upon and continue applying previous learning.*
2.5 Add or substitute individual sounds in simple, one-syllable words to make new words.	*2.5 Students are expected to build upon and continue applying previous learning.*	

Standard 3: Know and apply grade-level phonics and word analysis skills when decoding words.

3.1 Produce one-to-one letter-sound correspondences for each consonant.	3.1 Demonstrate the sound correspondences for common consonant blends and digraphs.	3.1 Use knowledge of r-controlled vowels to read.
3.2 Associate long and short sounds of the five major vowels with their common spellings.	3.2 Use knowledge that every syllable must have a vowel sound to determine the number of syllables in words.	3.2 Use knowledge of how syllables work to read multisyllabic words.
3.3 Read regularly spelled one-syllable words.	3.3 Read a two-syllable word by breaking the word into syllables.	3.3 Read irregularly spelled two-syllable words and words with common prefixes and suffixes.
3.4 Distinguish between similarly spelled consonant-vowel-consonant-patterned words by identifying the sounds of the letters that differ.	3.4 Use final -e and common vowel team conventions to read words with long vowel sounds.	3.4 Use and apply knowledge of vowel diphthongs.
3.5 Read common high-frequency words.	3.5 Read words with inflectional endings.	3.5 Use and apply knowledge of how inflectional endings change words.
3.6 Recognize grade-appropriate irregularly spelled words.	3.6 Recognize and read grade-appropriate irregularly spelled words.	3.6 Recognize and read grade-appropriate irregularly spelled words.

Standard 4: Read with sufficient accuracy and fluency to support comprehension.

4.1 Read emergent-reader texts with purpose and understanding.	4.1 Read grade-level texts with purpose and understanding.	4.1 Read grade-level texts with purpose and understanding.
4.2 Read emergent texts orally with accuracy, appropriate rate, and expression.	4.2 Read grade-level texts orally with accuracy, appropriate rate, and expression on successive readings.	4.2 Read grade-level texts orally with accuracy, appropriate rate, expression, intonation, and phrasing on successive readings.
4.3 Use picture cues to confirm or self-correct word recognition and understanding.	4.3 Use context to confirm or self-correct word recognition and understanding rereading as necessary.	*dents are expected to build upon and continue applying previous learning.*

Meaning and Context (MC)

Standard 5: Determine meaning and develop logical interpretations by making predictions, inferring, drawing conclusions, analyzing, synthesizing, providing evidence, and investigating multiple interpretations.

KINDERGARTEN	GRADE ONE	GRADE TWO
5.1 With guidance and support, ask and answer who, what, when, where, why, and how questions about a text; refer to key details to make inferences and draw conclusions in texts heard or read.	5.1 Ask and answer who, what, when, where, why, and how questions to demonstrate understanding of a text; use key details to make inferences and draw conclusions in texts heard or read.	5.1 Ask and answer literal and inferential questions to demonstrate understanding of a text; use specific details to make inferences and draw conclusions in texts heard or read.
5.2 With guidance and support, ask and answer questions to make predictions using prior knowledge, pictures, illustrations, title, and information about author and illustrator.	5.2 Make predictions using prior knowledge, pictures, illustrations, title, and information about author and illustrator.	5.2 Make predictions before and during reading; confirm or modify thinking.

Standard 6: Summarize key details and ideas to support analysis of thematic development.

6.1 Describe the relationship between illustrations and the text.	6.1 Describe the relationship between the illustrations and the characters, setting or events.	6.1 Use information gained from illustrations and words in a print or multimedia text to demonstrate understanding of its characters, setting, or plot.

Standard 7: Analyze the relationship among ideas, themes, or topics in multiple media and formats, and in visual, auditory, and kinesthetic modalities.

7.1 With guidance and support, retell a familiar text; identify beginning, middle, and end in a text heard or read.	7.1 Retell text, including beginning, middle, and end; use key details to determine the theme in a text heard or read.	7.1 Retell the sequence of major events using key details; determine the theme in a text heard or read.
7.2 Read or listen closely to compare familiar texts.	7.2 Read or listen closely to compare and contrast familiar texts and texts in author and genre studies.	7.2 Read or listen closely to compare and contrast multiple versions of the same story; compare and contrast texts in author and genre studies.

Standard 8: Analyze characters, settings, events, and ideas as they develop and interact within a particular context.

8.1 With guidance and support, read or listen closely to: a. describe characters and their actions; b. compare characters' experiences to those of the reader; c. describe setting; d. identify the problem and solution; and e. identify the cause of an event.	8.1 Read or listen closely to: a. describe characters' actions, and feelings; b. compare and contrast characters' experiences to those of the reader; c. describe setting; d. identify the plot including problem and solution; and e. describe cause and effect relationships.	8.1 Read or listen closely to: a. compare and contrast characters' actions, feelings, and responses to major events or challenges; b. describe how cultural context influences characters, setting, and the development of the plot; and c. explain how cause and effect relationships affect the development of plot.

Language, Craft, and Structure (LCS)

Standard 9: Interpret and analyze the author's use of words, phrases, and conventions, and how their relationships shape meaning and tone in print and multimedia texts.

KINDERGARTEN	GRADE ONE	GRADE TWO
9.1 With guidance and support, identify the literary devices of repetitive language and the sound devices of rhyme, onomatopoeia, and alliteration; identify when the author uses each.	9.1 Identify the literary devices of rhythm, repetitive language, and simile and sound devices of rhyme, onomatopoeia, and alliteration; explain how the author uses each.	9.1 Identify the literary devices of simile and metaphor and sound devices; explain how the author uses each.
9.2 With guidance and support, identify how an author's choice of words, phrases, conventions, and illustrations suggest feelings, appeal to the senses, and contribute to meaning.	9.2 Identify how an author's choice of words, phrases, conventions, and illustrations suggest feelings, appeal to the senses, and contribute to meaning.	9.2 Explain how words, phrases, conventions, and illustrations communicate feelings, appeal to the senses, influence the reader, and contribute to meaning.

Standard 10: Apply a range of strategies to determine and deepen the meaning of known, unknown, and multiple-meaning words, phrases, and jargon; acquire and use general academic and domain-specific vocabulary.

10.1 With guidance and support, ask and answer questions about known and unknown words.	10.1 Ask and answer questions about known and unknown words.	10.1 Use context to determine the meaning of words and phrases.
10.2 With guidance and support, identify new meanings for familiar words and apply them accurately.	10.2 Identify new meanings for familiar words and apply them accurately.	10.2 Determine the meaning of a newly formed word when a known affix is added to a known word.
10.3 With guidance and support, use inflectional endings and affixes to determine the meaning of unknown words.	10.3 Use inflectional endings and affixes to determine the meaning of unknown words.	10.3 Use a base word to determine the meaning of an unknown word with the same base.
10.4 With guidance and support, identify the individual words used to form a compound word.	10.4 Identify the individual words used to form a compound word.	10.4 Use the meanings of individual words to predict the meaning of compound words.
10.5 With guidance and support, use print and multimedia resources to explore word relationships and nuances in word meanings.	10.5 Use print and multimedia resources to explore word relationships and nuances in word meanings.	10.5 Use print and multimedia resources to determine or clarify the precise meaning of words or phrases.
10.6 With guidance and support, use words and phrases acquired through talk and text; explore nuances of words and phrases.	10.6 Use words and phrases acquired through talk and text; explore nuances of words and phrases.	10.6 Acquire and use general academic and domain-specific words and phrases acquired through talk and text; explore nuances of words and phrases.

Standard 11: Analyze and provide evidence of how the author's choice of point of view, perspective, or purpose shapes content, meaning, and style.

11.1 Identify the author and illustrator and define the role of each.	11.1 Identify the author's purpose—to explain, entertain, inform, or convince.	11.1 Identify and analyze the author's purpose.
11.2 Identify who is telling the story, the narrator or characters.	11.2 Distinguish who is telling the story at various points in a text, the narrator or characters.	11.2 Recognize differences between the points of view and perspectives of the narrator and various characters.

Standard 12: Analyze and critique how the author uses structures in print and multimedia texts to shape meaning and impact the reader.

12.1 Recognize and sort types of literary texts.	12.1 Classify literary texts according to characteristics of a genre.	12.1 Describe the overall structure of a narrative including how the beginning introduces and the ending concludes the action.

12.2 Recognize the crafted text structure of recurring phrases.	12.2 Recognize how the author uses the crafted text structures of recurring phrases and dialogue.	12.2 Recognize characteristics of crafted text structures such as diary, seesaw texts, and circular texts.

Range and Complexity (RC)

Standard 13: Read independently and comprehend a variety of texts for the purposes of reading for enjoyment, acquiring new learning, and building stamina; reflect and respond to increasingly complex text over time.

KINDERGARTEN	GRADE ONE	GRADE TWO
13.1 Engage in whole and small group reading with purpose and understanding.	13.1 Engage in whole and small group reading with purpose and understanding.	13.1 Engage in whole and small group reading with purpose and understanding.
13.2 Read independently for sustained periods of time to build stamina.	13.2 Read independently for sustained periods of time to build stamina.	13.2 Read independently for sustained periods of time to build stamina.
13.3 Read and respond according to task and purpose to become self-directed, critical readers and thinkers.	13.3 Read and respond according to task and purpose to become self-directed, critical readers and thinkers.	13.3 Read and respond according to task and purpose to become self-directed, critical readers and thinkers.

Reading – Informational Text (RI)

Expectations for Teaching and Learning
Learning should be modeled, supported, and reflect gradual release of responsibility at all levels.
Teachers should continue to address earlier standards as they apply to more complex text.
Students are expected to build upon and continue applying concepts learned previously.

By the end of second grade, students read informational (expository/persuasive/argumentative) texts in print and multimedia formats of the following types: essays, historical documents, informational trade books, textbooks, news and feature articles, magazine articles, advertisements, encyclopedic entries, book reviews, journals, and speeches. They also read directions, maps, timelines, and graphs.

Fundamentals of Reading

- Integrate an information (cueing) system that includes meaning (semantics), structure (syntax), visual (graphophonic), and pragmatics (schematic) to make meaning from text.
- Gain understanding by applying reading strategies of monitoring, searching, confirming, cross-checking, rereading and self-correcting.
- Employ comprehension strategies before, during, and after reading text using schema, annotating, questioning, visualizing, drawing inferences, determining importance, summarizing, and synthesizing.
- Use metacognition to monitor meaning and adjust strategies while reading.
- Notice and analyze the styles and techniques authors use to help readers construct meaning.

Principles of Reading (P)

Standard 1: Demonstrate understanding of the organization and basic features of print.

KINDERGARTEN	GRADE ONE	GRADE TWO
1.1 Follow words from left to right, top to bottom, and front to back.	1.1 Recognize the distinguishing features of a sentence.	*1.1 Students are expected to build upon and continue applying previous learning.*
1.2 Recognize that spoken words are represented in written language by specific sequences of letters.	*1.2 Students are expected to build upon and continue applying previous learning.*	
1.3 Understand that words are separated by spaces in print.	*1.3 Students are expected to build upon and continue applying previous learning.*	
1.4 Recognize and name all upper- and lowercase letters of the alphabet.	*1.4 Students are expected to build upon and continue applying previous learning.*	

Standard 2: Demonstrate understanding of spoken words, syllables, and sounds.

2.1 Recognize and produce rhyming words.	2.1 Distinguish long from short vowel sounds in spoken single-syllable words.	*2.1 Students are expected to build upon and continue applying previous learning.*
2.2 Count, pronounce, blend, and segment syllables in spoken words.	2.2 Produce single-syllable words by blending sounds, including consonant blends in spoken words.	*2.2 Students are expected to build upon and continue applying previous learning.*
2.3 Blend and segment onsets and rimes of single-syllable spoken words.	2.3 Isolate and pronounce initial, medial, and final sounds in spoken single-syllable words.	*2.3 Students are expected to build upon and continue applying previous learning.*
2.4 Isolate and pronounce the initial, medial, and final sounds in a three-phoneme word.	2.4 Segment spoken single-syllable words into their complete sequence of individual sounds.	*2.4 Students are expected to build upon and continue applying previous learning.*
2.5 Add or substitute individual sounds in simple, one-syllable words to make new words.	*2.5 Students are expected to build upon and continue applying previous learning.*	

Standard 3: Know and apply grade-level phonics and word analysis skills when decoding words.

3.1 Produce one-to-one letter-sound correspondences for each consonant.	3.1 Demonstrate the sound correspondences for common consonant blends and digraphs.	3.1 Use knowledge of r-controlled vowels to read.
3.2 Associate long and short sounds of the five major vowels with their common spellings.	3.2 Use knowledge that every syllable must have a vowel sound to determine the number of syllables in words.	3.2 Use knowledge of how syllables work to read multisyllabic words.
3.3 Read regularly spelled one-syllable words.	3.3 Read a two-syllable word by breaking the word into syllables.	3.3 Read irregularly spelled two-syllable words and words with common prefixes and suffixes.
3.4 Distinguish between similarly spelled consonant-vowel-consonant-patterned words by identifying the sounds of the letters that differ.	3.4 Use final -e and common vowel team conventions to read words with long vowel sounds.	3.4 Use and apply knowledge of vowel diphthongs.
3.5 Read common high-frequency words.	3.5 Read words with inflectional endings.	3.5 Use and apply knowledge of how inflectional endings change words.
3.6 Recognize grade-appropriate irregularly spelled words.	3.6 Recognize and read grade-appropriate irregularly spelled words.	3.6 Recognize and read grade-appropriate irregularly spelled words.

Standard 4: Read with sufficient accuracy and fluency to support comprehension.

4.1 Read emergent-reader texts with purpose and understanding.	4.1 Read grade-level texts with purpose and understanding.	4.1 Read grade-level texts with purpose and understanding.
4.2 Read emergent texts orally with accuracy, appropriate rate, and expression.	4.2 Read grade-level texts orally with accuracy, appropriate rate, and expression on successive readings.	4.2 Read grade-level texts orally with accuracy, appropriate rate, expression, intonation, and phrasing on successive readings.
4.3 Use picture cues to confirm or self-correct word recognition and understanding.	4.3 Use context to confirm or self-correct word recognition and understanding rereading as necessary.	*Students are expected to build upon and continue applying previous learning.*

Meaning and Context (MC)

Standard 5: Determine meaning and develop logical interpretations by making predictions, inferring, drawing conclusions, analyzing, synthesizing, providing evidence, and investigating multiple interpretations.

KINDERGARTEN	GRADE ONE	GRADE TWO
5.1 With guidance and support, ask and answer who, what, when, where, why, and how questions about a text; refer to key details to make inferences and draw conclusions in texts heard or read.	5.1 Ask and answer who, what, when, where, why, and how questions to demonstrate understanding of a text; use key details to make inferences and draw conclusions in texts heard or read.	5.1 Ask and answer literal and inferential questions to demonstrate understanding of a text; use specific details to make inferences and draw conclusions in texts heard or read.
5.2 With guidance and support, ask and answer questions to make predictions using prior knowledge, pictures, illustrations, title, and information about author and illustrator.	5.2 Make predictions using prior knowledge, pictures, illustrations, title, and information about author and illustrator.	5.2 Make predictions before and during reading; confirm or modify thinking.

Standard 6: Summarize key details and ideas to support analysis of central ideas.

6.1 With guidance and support, retell the central idea and identify key details to summarize a text heard, read, or viewed.	6.1 Retell the central idea and key details to summarize a text heard, read, or viewed.	6.1 Retell the central idea and key details from multi-paragraph texts; summarize the text by stating the topic of each paragraph heard, read, or viewed.

Standard 7: Research events, topics, ideas, or concepts through multiple media, formats, and in visual, auditory, and kinesthetic modalities.

7.1 With guidance and support, compare topics or ideas within a thematic or author study heard, read, or viewed.	7.1 Compare and contrast topics or ideas within a thematic or author study heard, read, or viewed.	7.1 Compare and contrast topics, ideas, or concepts across texts in a thematic, author, or genre study heard, read, or viewed.

Language, Craft, and Structure (LCS)

Standard 8: Interpret and analyze the author's use of words, phrases, text features, conventions, and structures, and how their relationships shape meaning and tone in print and multimedia texts.

KINDERGARTEN	GRADE ONE	GRADE TWO
8.1 With guidance and support, identify words, phrases, illustrations, and photographs used to provide information.	8.1 Identify words, phrases, illustrations, and photographs used to provide information.	8.1 Identify how the author uses words,-phrases, illustrations, and photographs to inform, explain, or describe.
8.2 With guidance and support, use front cover, title page, illustrations/ photographs, fonts, glossary, and table of contents to locate and describe key facts or information; describe the relationship between these features and the text.	8.2 Use front cover, title page, illustrations/ photographs, fonts, glossary, and table of contents to locate and describe key facts or information; describe the relationship between these features and the text.	8.2 Use index, headings, bullets, and captions to locate key facts and information; explain the relationship between these features and the text.

Standard 9: Apply a range of strategies to determine and deepen the meaning of known, unknown, and multiple-meaning words, phrases, and jargon; acquire and use general academic and domain-specific vocabulary.

9.1 With guidance and support, ask and answer questions about known and unknown words.	9.1 Ask and answer questions about known and unknown words in a text.	9.1 Use context to determine the meaning of words and phrases.
9.2 With guidance and support, identify new meanings for familiar words and apply them accurately.	9.2 Identify new meanings for familiar words and apply them accurately.	9.2 Determine the meaning of a newly formed word when a known affix is added to the word.
9.3 With guidance and support, use inflectional endings and affixes to determine the meaning of unknown words.	9.3 Use inflectional endings and affixes to determine the meaning of unknown words.	9.3 Use a base word to determine the meaning of an unknown word with the same base.
9.4 With guidance and support, use print and multimedia resources to explore word relationships and meanings.	9.4 Use print and multimedia resources to explore word relationships and meanings.	9.4 Use print and multimedia resources to determine or clarify the precise meaning of words and phrases.
9.5 With guidance and support, use words and phrases acquired through talk and text; explore nuances of words and phrases.	9.5 Use words and phrases acquired through talk and text; explore nuances of words and phrases.	9.5 Acquire and use general academic and domain-specific words and phrases acquired through talk and text; identify nuances of words and phrases.

Standard 10: Analyze and provide evidence of how the author's choice of purpose and perspective shapes content, meaning, and style.

10.1 Identify the author and illustrator and define the role of each.	10.1 Identify the author's purpose – to explain, entertain, inform, or convince.	10.1 Identify and analyze the author's purpose.

Standard 11: Analyze and critique how the author uses structures in print and multimedia texts to craft informational and argument writing.

11.1 With guidance and support, explore informational text structures within texts heard or read.	11.1 Explore informational text structures within texts heard or read; identify sequential order and compare and contrast relationships.	11.1 Identify sequential order, cause and effect relationships, and compare and contrast structures within texts to locate information and gain meaning.
11.2 With guidance and support, identify the reasons an author gives to support a position.	11.2 Identify the reasons an author gives to support a position.	11.2 Identify the structures an author uses to support specific points.

Range and Complexity (RC)

Standard 12: Read independently and comprehend a variety of texts for the purposes of reading for enjoyment, acquiring new learning, and building stamina; reflect and respond to increasingly complex text over time.

KINDERGARTEN	GRADE ONE	GRADE TWO
12.1 Engage in whole and small group reading with purpose and understanding.	12.1 Engage in whole and small group reading with purpose and understanding.	12.1 Engage in whole and small group reading with purpose and understanding.
12.2 Read independently for sustained periods of time.	12.2 Read independently for sustained periods of time.	12.2 Read independently for sustained periods of time.
12.3 Read and respond according to task and purpose to become self-directed, critical readers, and thinkers.	12.3 Read and respond according to task and purpose to become self-directed, critical readers, and thinkers.	12.3 Read and respond according to task and purpose to become self-directed, critical readers, and thinkers.

Writing (W)

Expectations for Teaching and Learning

Learning should be modeled, supported, and reflect gradual release of responsibility at all levels.
Teachers should continue to address earlier standards as they apply to more complex text.
Students are expected to build upon and continue applying concepts learned previously.

Fundamentals of Writing

- Employ a recursive writing process that includes planning, drafting, revising, editing, rewriting, publishing, and reflecting.
- Interact and collaborate with peers and adults to develop and strengthen writing.
- Produce writing in which the development, organization, and style are appropriate to task, purpose, discipline, and audience.
- Use clear and coherent written language to accomplish a purpose such as learning, enjoyment, argument, and the exchange of information.
- Monitor progress throughout the writing process and adjust strategies as needed from independence to collaboration within a writing community.
- Incorporate authors' craft techniques observed from wide reading of anchor and mentor texts across disciplines to inform, explain, convince/argue, and entertain.

Meaning, Context, and Craft (MCC)

Standard 1: Write arguments to support claims with clear reasons and relevant evidence.

KINDERGARTEN	GRADE ONE	GRADE TWO
1.1 Use a combination of drawing, dictating, and writing to state the topic and communicate an opinion about it.	1.1 Explore print and multimedia sources to write opinion pieces that introduce the topic, state an opinion, give a reason for the opinion, and provide a sense of closure.	1.1 Explore print and multimedia sources to write opinion pieces that introduce the topic or text, state an opinion and supply reasons that support the opinion, use transitional words to connect opinions and reasons, and provide a concluding statement or section.

Standard 2: Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.

2.1 Use a combination of drawing, dictating, and writing to compose informative/explanatory texts that name and supply information about the topic.	2.1 Explore print and multimedia sources to write informative/explanatory texts that name a topic, supply facts about the topic, and provide a sense of closure.	2.1 Explore print and multimedia sources to write informative/explanatory texts that introduce a topic, use facts and definitions to develop points, and provide a concluding statement or section.

Standard 3: Write narratives to develop real or imagined experiences or events using effective techniques, well-chosen details, and well-structured event sequences.

3.1 Use a combination of drawing, dictating, and writing to narrate a single event or several loosely linked events, to tell about the events in the order in which they occurred, and to provide a reaction to what happened.	3.1 Explore multiple texts to write narratives that recount two or more sequenced events, include details, use temporal words to signal event order, and provide a sense of closure.	3.1 Explore multiple texts to write narratives that recount a well-elaborated event or short sequence of events, include details to describe actions, thoughts, and feelings, use temporal words to signal event order, and provide a sense of closure.

Language (L)

Standard 4: Demonstrate command of the conventions of standard English grammar and usage when writing and speaking.

KINDERGARTEN	GRADE ONE	GRADE TWO
4.1 With guidance and support, use nouns.	4.1 Use common, proper, and possessive nouns.	4.1 Use collective nouns.
4.2 With guidance and support, form regular plural nouns orally by adding /s/ or /es/.	4.2 Use singular and plural nouns with matching verbs in basic sentences.	4.2 Form and use frequently occurring irregular plural nouns.
4.3 With guidance and support, understand and use interrogatives.	4.3 Use personal, possessive, and indefinite pronouns.	4.3 Use reflexive pronouns.
4.4 With guidance and support, use verbs.	4.4 Use verbs to convey a sense of past, present, and future.	4.4 Form and use the past tense of frequently occurring irregular verbs.
4.5 With guidance and support, use adjectives.	4.5 Use adjectives and adverbs.	4.5 Use adjectives and adverbs, and choose between them depending on what is to be modified.
4.6 With guidance and support, use prepositional phrases.	4.6 Use prepositions.	4.6 Use positional, time, and place prepositions.
4.7 With guidance and support, use conjunctions.	4.7 Use conjunctions.	4.7 Use conjunctions.
4.8 Produce and expand complete sentences.	4.8 Produce and expand complete simple and compound declarative, interrogative, imperative, and exclamatory sentences.	4.8 Produce, expand, and rearrange complete simple and compound sentences.

Standard 5: Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

5.1 Capitalize the first word in a sentence and the pronoun *I*.	5.1 Capitalize the first word of a sentence, dates, names, and the pronoun *I*.	5.1 Capitalize greetings, months, days of the week, holidays, geographic names, and titles.

5.2 Recognize and name end punctuation.	5.2 Use: a. periods, question marks, and exclamation marks at the end of sentences; and b. commas in dates and to separate items in a series.	5.2 Use: a. periods, question marks, or exclamation marks at the end of sentences; b. commas in greetings and closings of letters, dates, and to separate items in a series; and c. apostrophes to form contractions and singular possessive nouns.
5.3 Write letter(s) for familiar consonant and vowel sounds.	5.3 Use conventional spelling for words with common spelling patterns.	5.3 Generalize learned spelling patterns and word families.
5.4 Spell simple words phonetically.	5.4 Spell unknown words phonetically; spell common irregularly-spelled, grade-appropriate high-frequency words.	5.4 Correctly spell words with short and long vowel sounds, r-controlled vowels, consonant-blend patterns, and common irregularly-spelled grade- appropriate high frequency words.
5.5 Consult print and multimedia resources to check and correct spellings.	5.5 Consult print and multimedia resources to check and correct spellings.	5.5 Consult print and multimedia resources to check and correct spellings.

Range and Complexity (RC)

Standard 6: Write independently, legibly, and routinely for a variety of tasks, purposes, and audiences over short and extended time frames.

KINDERGARTEN	GRADE ONE	GRADE TWO
6.1 With guidance and support, write routinely and persevere in writing tasks for a variety of purposes and audiences.	6.1 With guidance and support, write routinely and persevere in writing tasks for a variety of purposes and audiences.	6.1 Write routinely and persevere in writing tasks over short and extended time frames, for a range of domain-specific tasks, and for a variety of purposes and audiences.
6.2 Print upper-and lowercase letters.	6.2 Print upper- and lower-case letters proportionally, using appropriate handwriting techniques.	6.2 Print upper- and lower-case letters proportionally using appropriate handwriting techniques.
6.3 Recognize that print moves from left to right and that there are spaces between words.	6.3 Write left to right leaving space between words.	*6.3 Students are expected to build upon and continue applying previous learning.*
6.4 Locate letter keys on an electronic device.	6.4 Locate letter keys on an electronic device to type simple messages.	6.4 Begin to develop efficient keyboarding skills.
This indicator begins in Grade Two.		6.5 Begin to develop cursive writing.

Communication (C)

Expectations for Teaching and Learning
Learning should be modeled, supported, and reflect gradual release of responsibility at all levels.
Teachers should continue to address earlier standards as they apply to more complex text.
Students are expected to build upon and continue applying concepts learned previously.

Fundamentals of Communication

- Employ a reciprocal communication process that includes planning, drafting, revising, editing, reviewing, presenting, and reflecting.
- Communicate using style, language, and nonverbal cues appropriate to task, purpose, and audience.
- Use active and attentive communication skills, building on other's ideas to explore, learn, enjoy, argue, and exchange information.
- Monitor delivery and reception throughout the communication process and adjust approach and strategies as needed.
- Adjust speech, using standard English when indicated or appropriate, in a variety of contexts and tasks for presenting or participating in the social exchange of ideas.
- Acquire vocabulary from multiple forms of communication; use newly acquired vocabulary to appropriately communicate in a variety of situations and contexts.

Meaning and Context (MC)

Standard 1: Interact with others to explore ideas and concepts, communicate meaning, and develop logical interpretations through collaborative conversations; build upon the ideas of others to clearly express one's own views while respecting diverse perspectives.

KINDERGARTEN	GRADE ONE	GRADE TWO
1.1 Explore and create meaning through play, conversation, drama, and story-telling.	1.1 Explore and create meaning through conversation, drama, questioning, and story-telling.	1.1 Explore and create meaning through conversation, drama, questioning, and story-telling.
1.2 Practice the skills of taking turns, listening to others, and speaking clearly.	1.2 Practice the skills of taking turns, listening to others, and speaking clearly.	1.2 Apply the skills of taking turns, listening to others, and speaking clearly.
1.3 Practice verbal and nonverbal techniques including volume and tone, eye contact, facial expressions, and posture.	1.3 Practice techniques of volume, eye contact, facial expressions, posture, gestures, and space.	1.3 Apply verbal and nonverbal techniques including volume and tone, eye contact, facial expressions, and posture.
1.4 Participate in conversations with varied partners about focused grade level topics and texts in small and large groups.	1.4 Participate in shared conversations with varied partners about focused grade level topics and texts in small and large groups.	1.4 Participate in shared conversations with varied partners about focused grade level topics and texts in small and large groups.

1.5 Explain personal ideas and build on the ideas of others by responding and relating to comments made.	1.5 Explain personal ideas and build on the ideas of others by responding and relating to comments made in multiple exchanges.	1.5 Explain personal ideas and build on the ideas of others by responding and relating to comments made in multiple exchanges.
1.6 This indicator does not begin until English 1. ***English 1*** *Utilize various modes of communication to present a clear, unique interpretation of diverse perspectives.*		

Standard 2: Articulate ideas, claims, and perspectives in a logical sequence using information, findings, and credible evidence from sources.

2.1 With guidance and support, recall information from experiences or gather information from sources to ask and answer questions.	2.1 Express ideas gathered from various print and multimedia sources in a clear and concise manner.	2.1 Articulate ideas and information gathered from various print and multimedia in a concise manner that maintains a clear focus.
2.2 With guidance and support, participate in shared research exploring a variety of texts; express opinions and talk about findings.	2.2 Participate in shared research exploring a variety of texts; express opinions and talk about findings.	2.2 Participate in shared research; record observations, new learning, opinions and articulate findings.

Standard 3: Communicate information through strategic use of multiple modalities and multimedia to enrich understanding when presenting ideas and information.

3.1 Explore how ideas and topics are depicted in a variety of media and formats.	3.1 Explore and compare how ideas and topics are depicted in a variety of media and formats.	3.1 Explain how ideas and topics are depicted in a variety of media and formats.
3.2 Use appropriate props, images, or illustrations to support verbal communication.	3.2 Use visual displays to support verbal communication and clarify ideas, thoughts, and feelings.	3.2 Create a simple presentation using audio, visual, and/or multimedia tools to support communication and clarify ideas, thoughts, and feelings.

Language, Craft and Structure (LCS)

Standard 4: Critique how a speaker addresses content and uses stylistic and structural craft techniques to inform, engage, and impact audiences.

KINDERGARTEN	GRADE ONE	GRADE TWO
4.1 Identify speaker's purpose.	4.1 Identify speaker's purpose and details that keep the listener engaged.	4.1 Identify speaker's purpose and details that keep the listener engaged.
4.2 Identify the introduction and conclusion of a presentation.	4.2 Identify the introduction, body, and conclusion of a presentation.	4.2 Determine if the presentation has a logical introduction, body, and conclusion.
4.3 Identify when the speaker uses intonation and word stress.	4.4 Identify when the speaker uses intonation and word stress and includes media.	4.4 Identify when the speaker uses intonation and word stress, includes media,

		addresses the audience, and determines word choice.

Standard 5: Incorporate craft techniques to engage and impact audience and convey messages.

5.1 Use voice inflection, expression, rhythm, and rhyme, when presenting poems, short stories, role-plays, or songs.	5.1 Present poems, short stories, role-plays, or songs using voice inflection, expression, rhythm, and rhyme.	5.1 Utilize intonation and word stress to highlight essential concepts and engage the audience.
5.2 Employ repetitive language, onomatopoeia, and/or alliteration to impact the audience.	5.2 Employ a combination of words, phrases, rhythm, rhyme, repetitive language, similes, onomatopoeia, and alliteration for impact.	5.2 Employ a combination of words, phrases, rhythm, rhyme, repetitive language, similes, metaphor, onomatopoeia, and alliteration for impact.
5.3 This Indicator does not begin until English 1. ***English 1*** *Develop messages that use logical, emotional, and ethical appeals.*		

Disciplinary Literacy

Reading, writing, communicating, thinking critically, and performing in meaningful, relevant ways within and across disciplines are essential practices for accessing and deeply understanding content. Immersion in the language and thinking processes valued by each discipline guides students to develop and cultivate a deeper understanding of particular disciplines.

College- and career-ready students must be able to expertly navigate curriculum, paying close attention to practices unique to a particular discipline. Disciplinary Literacy works in concert with Inquiry-Based Literacy Standards to prepare students for the demands of the 21st century. These practices also offer opportunities for students to demonstrate their understanding of the content in traditional and non-traditional ways.

The *South Carolina College- and Career-Ready Standards for English Language Arts 2015* include the Disciplinary Literacy practices listed below:

- **Read, write, and communicate using knowledge of a particular discipline.**
- **Integrate the Reading, Writing, and Communication Standards and the Inquiry-Based Literacy Standards to communicate and create understanding within content areas.**
- **Extend and deepen understanding of content through purposeful, authentic, real-world tasks to show understanding and integration of content within and across disciplines.**

Grade Three through Five
Standards and Indicators

State Board Approved – First Reading January 21, 2015

Inquiry-Based Literacy Standards (I)

Standard 1: Formulate relevant, self-generated questions based on interests and/or needs that can be investigated.

GRADE THREE	GRADE FOUR	GRADE FIVE
1.1 Formulate questions to focus thinking on an idea to narrow and direct further inquiry.	1.1 Formulate questions to focus thinking on an idea to narrow and direct further inquiry.	1.1 Formulate questions to focus thinking on an idea to narrow and direct further inquiry.

Standard 2: Transact with texts to formulate questions, propose explanations, and consider alternative views and multiple perspectives.

2.1 Explore topics of interest to formulate logical questions; build knowledge; generate possible explanations; consider alternative views.	2.1 Explore topics of interest to formulate logical questions; build knowledge; generate possible explanations; consider alternative views.	2.1 Explore topics of interest to formulate logical questions; build knowledge; generate possible explanations; consider alternative views.

Standard 3: Construct knowledge, applying disciplinary concepts and tools, to build deeper understanding of the world through exploration, collaboration, and analysis.

3.1 Develop a plan of action for collecting relevant information from primary and secondary sources.	3.1 Develop a plan of action for collecting relevant information from primary and secondary sources.	3.1 Develop a plan of action for collecting relevant information from primary and secondary sources.
3.2 Organize and categorize important information; collaborate to validate or revise thinking; report relevant findings.	3.2 Organize and categorize important information; collaborate to validate or revise thinking; report relevant findings.	3.2 Organize and categorize important information; collaborate to validate or revise thinking; report relevant findings.

Standard 4: Synthesize information to share learning and/or take action.

4.1 Draw logical conclusions from relationships and patterns discovered during the inquiry process.	4.1 Draw logical conclusions from relationships and patterns discovered during the inquiry process.	4.1 Draw logical conclusions from relationships and patterns discovered during the inquiry process.
4.2 Reflect on findings to build deeper understanding and determine next steps.	4.2 Reflect on findings to build deeper understanding and determine next steps.	4.2 Reflect on findings to build deeper understanding and determine next steps.
4.3 Determine appropriate tools and develop plan to communicate findings and/or take informed action.	4.3 Determine appropriate tools and develop plan to communicate findings and/or take informed action.	4.3 Determine appropriate tools and develop plan to communicate findings and/or take informed action.

Standard 5: Reflect throughout the inquiry process to assess metacognition, broaden understanding, and guide actions, both individually and collaboratively.

5.1 Acknowledge and value individual and collective thinking.	5.1 Acknowledge and value individual and collective thinking.	5.1 Acknowledge and value individual and collective thinking.
5.2 Employ past learning to monitor and assess current learning to guide inquiry.	5.2 Employ past learning to monitor and assess current learning to guide inquiry.	5.2 Employ past learning to monitor and assess current learning to guide inquiry.
5.3 Assess the process to revise plan and strategies to apply learning for future inquiry.	5.3 Assess the process to revise plan and strategies to apply learning for future inquiry.	5.3 Assess the process to revise plan and strategies to apply learning for future inquiry.

Reading – Literary Text (RL)

Expectations for Teaching and Learning
Learning should be modeled, supported, and reflect gradual release of responsibility at all levels.
Teachers should continue to address earlier standards as they apply to more complex text.
Students are expected to build upon and continue applying concepts learned previously.

By the end of fifth grade, students read four major types of literary texts in print and multimedia formats: fiction, literary nonfiction, poetry, and drama. In the category of fiction, they read the following specific types of texts: chapter books, adventure stories, historical fiction, contemporary realistic fiction, science fiction, picture books, folktales, legends, tall tales, and myths. In the category of literary nonfiction, they read personal essays, autobiographical and biographical sketches, and speeches. In the category of poetry, they read narrative poems, lyrical poems, humorous poems, and free verse.

Fundamentals of Reading

- Integrate an information (cueing) system that includes meaning (semantics), structure (syntax), visual (graphophonic), and pragmatics (schematic) to make meaning from text.
- Gain understanding by applying reading strategies of monitoring, searching, confirming, cross-checking, rereading and self-correcting.
- Employ comprehension strategies before, during, and after reading text using schema, annotating, questioning, visualizing, drawing inferences, determining importance, summarizing, and synthesizing.
- Use metacognition to monitor meaning and adjust strategies while reading.
- Notice and analyze the styles and techniques authors use to help readers construct meaning.

Principles of Reading (P)

Standard 1: Demonstrate understanding of the organization and basic features of print.

GRADE THREE	GRADE FOUR	GRADE FIVE
1.1 Students are expected to build upon and continue applying previous learning. ***Grade 1*** *Recognize the distinguishing features of a sentence.*		
1.2 Students are expected to build upon and continue applying previous learning. ***Kindergarten*** *Recognize that spoken words are represented in written language by specific sequences of letters.*		
1.3 Students are expected to build upon and continue applying previous learning. ***Kindergarten*** *Understand that words are separated by spaces in print.*		
1.4 Students are expected to build upon and continue applying previous learning. ***Kindergarten*** *Recognize and name all upper- and lowercase letters of the alphabet.*		

Standard 2: Demonstrate understanding of spoken words, syllables, and sounds (phonemes).

2.1 Students are expected to build upon and continue applying previous learning. ***Grade 1*** *Distinguish long from short vowel sounds in spoken single-syllable words.*
2.2 Students are expected to build upon and continue applying previous learning. ***Grade 1*** *Orally produce single-syllable words by blending sounds including consonant blends in spoken words.*
2.3 Students are expected to build upon and continue applying previous learning. ***Grade 1*** *Isolate and pronounce initial, medial vowel, and final sounds in spoken single-syllable words.*
2.4 Students are expected to build upon and continue applying previous learning. ***Grade 1*** *Segment spoken single-syllable words into their complete sequence of individual sounds.*
2.5 Students are expected to build upon and continue applying previous learning. ***Kindergarten*** *Add or substitute individual sounds in simple, one-syllable words to make new words.*

Standard 3: Know and apply grade-level phonics and word analysis skills in decoding words.

3.1 Identify and know the meaning of the most common prefixes and derivational suffixes.	3.1 Use combined knowledge of all letter-sound correspondences, syllabication patterns, base words, and affixes to read accurately unfamiliar multisyllabic words in context.	*3.1 Students are expected to build upon and continue applying previous learning.*
3.2 Students are expected to build upon and continue applying previous learning. ***Grade 5*** *Use knowledge of how syllables work to read multisyllabic words.*		
3.3 Students are expected to build upon and continue applying previous learning. ***Grade 2*** *Read irregularly spelled two-syllable words and words with common prefixes and suffixes.*		
3.4 Students are expected to build upon and continue applying previous learning. ***Grade 2*** *Use and apply knowledge of vowel diphthongs.*		
3.5 Students are expected to build upon and continue applying previous learning. ***Grade 2*** *Use and apply knowledge of how inflectional endings change words.*		
3.6 Read grade-appropriate irregularly spelled words.	*3.6 Students are expected to build upon and continue applying previous learning.*	

Standard 4: Read with sufficient accuracy and fluency to support comprehension.

4.1 Students are expected to build upon and continue applying previous learning. ***Grade 2*** *Read grade-level text with purpose and understanding.*	
4.2 Read grade-level prose and poetry orally with accuracy, appropriate rate, expression, intonation, and phrasing on successive readings.	*Students are expected to build upon and continue applying previous learning.*

4.3 Students are expected to build upon and continue applying previous learning. ***Grade 1*** *Use context to confirm or self-correct word recognition and understanding, rereading as necessary.*

Meaning and Context (MC)

Standard 5: Determine meaning and develop logical interpretations by making predictions, inferring, drawing conclusions, analyzing, synthesizing, providing evidence, and investigating multiple interpretations.

GRADE THREE	GRADE FOUR	GRADE FIVE
5.1 Ask and answer literal and inferential questions to determine meaning; refer explicitly to the text to support inferences and conclusions.	5.1 Ask and answer inferential questions to analyze meaning beyond the text; refer to details and examples within a text to support inferences and conclusions.	5.1 Quote accurately to analyze the meaning of and beyond the text to support inferences and conclusions.
5.2 Students are expected to build upon and continue applying previous learning. ***Grade 2*** *Make predictions before and during reading; confirm or modify thinking.*		

Standard 6: Summarize key details and ideas to support analysis of thematic development.

6.1 Determine the theme by recalling key details that support the theme.	6.1 Determine the development of a theme within a text; summarize using key details.	6.1 Determine and analyze the development of a theme within a text; summarize using key details.

Standard 7: Analyze the relationship among ideas, themes, or topics in multiple media, formats, and in visual, auditory, and kinesthetic modalities.

7.1 Explain how illustrations contribute to create mood or emphasize aspects of character or setting.	7.1 Explore similarities and differences among textual, dramatic, visual, or oral presentations.	7.1 Compare and contrast textual, dramatic, visual, or oral presentations to identify similarities and differences.
7.2 Compare and contrast how an author uses characters to develop theme and plot in different texts within a series.	7.2 Compare and contrast the treatment of similar themes, topics, and patterns of events in texts and diverse media.	7.2 Compare and contrast the treatment of similar themes, topics, and patterns of events depicted in diverse modalities.

Standard 8: Analyze characters, settings, events, and ideas as they develop and interact within a particular context.

8.1 Use text evidence to: a. describe characters' traits, motivations, and feelings and explain how their actions contribute to the development of the plot; and b. explain the influence of cultural and historical context on characters, setting, and plot development.	8.1 Use text evidence to: a. explain how conflicts cause the characters to change or revise plans while moving toward resolution; and b. explain the influence of cultural, historical and social context on characters, setting, and plot development.	8.1 Cite evidence within text to: a. analyze two or more characters, events, or settings in a text and explain the impact on the plot; and, b. explain the influence of cultural, historical, social and political context on characters, setting, and plot development.

Language, Craft, and Structure (LCS)

Standard 9: Interpret and analyze the author's use of words, phrases, and conventions, and how their relationships shape meaning and tone in print and multimedia texts.

GRADE THREE	GRADE FOUR	GRADE FIVE
9.1 Identify and explain how the author uses metaphor, imagery, personification, hyperbole, and style to shape meaning.	9.1 Identify and explain how the author uses idioms, adages, and proverbs to shape meaning.	9.1 Cite examples of the author's use of figurative language, dialogue, imagery, idioms, adages, and proverbs to shape meaning and tone.
9.2 Explain how the author's choice of words, illustrations, and conventions combine to create mood, contribute to meaning, and emphasize aspects of a character or setting.	9.2 Explain how the author's choice of words, illustrations, and conventions combine to create mood, contribute to meaning, and emphasize aspects of a character or setting.	9.2 Analyze and cite examples of how the author's choice of words and conventions combine to create mood, shape meaning, and emphasize aspects of a character or setting.

Standard 10: Apply a range of strategies to determine and deepen the meaning of known, unknown, and multiple-meaning words, phrases, and jargon; acquire and use general academic and domain-specific vocabulary.

10.1 Use paragraph-level context to determine the meaning of words and phrases.	10.1 Use definitions, examples, and restatements to determine the meaning of words or phrases.	10.1 Use cause and effect relationships and comparisons to determine the meaning of words or phrases.
10.2 Determine the meaning of a word when an affix is added to a base word.	10.2 Determine the meaning of an unknown word using knowledge of base words and Greek and Latin affixes.	10.2 Determine the meaning of an unknown word using knowledge of base words and Greek and Latin affixes.
10.3 *Students are expected to build upon and continue applying previous learning.* ***Grade 2*** *Use a base word to determine the meaning of an unknown word with the same base.*		
10.4 *Students are expected to continue to build upon concepts learned previously.* ***Grade 2*** *Use the meanings of individual words to predict the meaning of compound words.*		
10.5 Consult print and multimedia resources to find the pronunciation and determine or clarify the precise meaning of key words or phrases.	10.5 Consult print and multimedia resources to find the pronunciation and determine or clarify the precise meaning of key words or phrases.	10.5 Consult print and multimedia resources to find the pronunciation and determine or clarify the precise meaning of key words or phrases.
10.6 Acquire and use general academic and domain-specific words and phrases that signal spatial and temporal relationships; demonstrate an understanding of nuances.	10.6 Acquire and use general academic and domain-specific words or phrases that signal precise actions, emotions, and states of being; demonstrate an understanding of nuances and jargon.	10.6 Acquire and use general academic and domain-specific words or phrases that signal contrast, addition, and logical relationships; demonstrate an understanding of nuances and jargon.

Standard 11: Analyze and provide evidence of how the author's choice of point of view, perspective, or purpose shapes content, meaning, and style.

11.1 Explain the differences between first and third person points of view.	11.1 Compare and contrast first and third person points of view; determine how an author's choice of point of view influences the content and meaning.	11.1 Explain how the author's choice of the point of view of a narrator or character impacts content, meaning, and how events are described.
11.2 Compare and contrast the reader's point of view to that of the narrator or a character.	*11.2 Students are expected to build upon and continue applying concepts learned previously.*	

Standard 12: Analyze and critique how the author uses structures in print and multimedia texts to shape meaning and impact the reader.

12.1 Identify text structures of various genres using the terms paragraph, chapter, scene, and stanza; describe how each part transitions.	12.1 Explain how a series of chapters, scenes, or stanzas fit together to provide the overall structure of a particular story, drama, or poem.	12.1 Explain how text structures in prose, drama, or poetry differ using terms unique to the genre.
12.2 Identify crafted text structures such as a collection of photograph or poetry texts, texts with a series of short memoirs, an inanimate voice text, and a framing question text.	12.2 Determine characteristics of crafted text structures and describe why an author uses this structure.	12.2 Compare how different crafted text structures contribute to meaning and impact the reader.

Range and Complexity (RC)

Standard 13: Read independently and comprehend a variety of texts for the purposes of reading for enjoyment, acquiring new learning, and building stamina; reflect and respond to increasingly complex text over time.

GRADE THREE	GRADE FOUR	GRADE FIVE
13.1 Engage in whole and small group reading with purpose and understanding.	13.1 Engage in whole and small group reading with purpose and understanding.	13.1 Engage in whole and small group reading with purpose and understanding.
13.2 Read independently for sustained periods of time to build stamina.	13.2 Read independently for sustained periods of time to build stamina.	13.2 Read independently for sustained periods of time to build stamina.
13.3 Read and respond according to task and purpose to become self-directed, critical readers and thinkers.	13.3 Read and respond according to task and purpose to become self-directed, critical readers and thinkers.	13.3 Read and respond according to task and purpose to become self-directed, critical readers and thinkers.

Reading – Informational Text (RI)

Expectations for Teaching and Learning
Learning should be modeled, supported, and reflect gradual release of responsibility at all levels.
Teachers should continue to address earlier standards as they apply to more complex text.
Students are expected to build upon and continue applying concepts learned previously.

By the end of fifth grade, students read informational (expository/persuasive/argumentative) texts in print and multimedia formats of the following types: essays, historical documents, informational trade books, textbooks, news and feature articles, magazine articles, advertisements, encyclopedia entries, reviews (for example, book, movie, product), journals, and speeches. They also read directions, maps, time lines, graphs, tables, charts, schedules, recipes, and photos embedded in informational texts. In addition, they examine commercials, documentaries, and other forms of multimedia informational texts.

Fundamentals of Reading

- Integrate an information (cueing) system that includes meaning (semantics), structure (syntax), visual (graphophonic), and pragmatics (schematic) to make meaning from text.
- Gain understanding by applying reading strategies of monitoring, searching, confirming, cross-checking, rereading and self-correcting.
- Employ comprehension strategies before, during, and after reading text using schema, annotating, questioning, visualizing, drawing inferences, determining importance, summarizing, and synthesizing.
- Use metacognition to monitor meaning and adjust strategies while reading.
- Notice and analyze the styles and techniques authors use to help readers construct meaning.

Principles of Reading (P)

Standard 1: Demonstrate understanding of the organization and basic features of print.

GRADE THREE	GRADE FOUR	GRADE FIVE
1.1 Students are expected to build upon and continue applying previous learning. ***Grade 1*** *Recognize the distinguishing features of a sentence.*		
1.2 Students are expected to build upon and continue applying previous learning. ***Kindergarten*** *Recognize that spoken words are represented in written language by specific sequences of letters.*		
1.3 Students are expected to build upon and continue applying previous learning. ***Kindergarten*** *Understand that words are separated by spaces in print.*		
1.4 Students are expected to build upon and continue applying previous learning. ***Kindergarten*** *Recognize and name all upper- and lowercase letters of the alphabet.*		

Standard 2: Demonstrate understanding of spoken words, syllables, and sounds (phonemes).

2.1 Students are expected to build upon and continue applying previous learning. ***Grade 1*** *Distinguish long from short vowel sounds in spoken single-syllable words.*
2.2 Students are expected to build upon and continue applying previous learning. ***Grade 1*** *Orally produce single-syllable words by blending sounds including consonant blends in spoken words.*
2.3 Students are expected to build upon and continue applying previous learning. ***Grade 1*** *Isolate and pronounce initial, medial vowel, and final sounds in spoken single-syllable words.*
2.4 Students are expected to build upon and continue applying previous learning. ***Grade 1*** *Segment spoken single-syllable words into their complete sequence of individual sounds.*
2.5 Students are expected to build upon and continue applying previous learning. ***Kindergarten*** *Add or substitute individual sounds in simple, one-syllable words to make new words.*

Standard 3: Know and apply grade-level phonics and word analysis skills in decoding words.

3.1 Identify and know the meaning of the most common prefixes and derivational suffixes.	3.1 Use combined knowledge of all letter-sound correspondences, syllabication patterns, base words, and affixes to read accurately unfamiliar multisyllabic words in context.	*3.1 Students are expected to build upon and continue applying previous learning.*
3.2 Students are expected to build upon and continue applying previous learning. ***Grade 2*** *Use knowledge of how syllables work to read multisyllabic words.*		
3.3 Students are expected to build upon and continue applying previous learning. ***Grade 2*** *Read irregularly spelled two-syllable words and words with common prefixes and suffixes.*		
3.4 Students are expected to build upon and continue applying previous learning. ***Grade 2*** *Use and apply knowledge of vowel diphthongs.*		
3.5 Students are expected to build upon and continue applying previous learning. ***Grade 2*** *Use and apply knowledge of how inflectional endings change words.*		
3.6 Read grade-appropriate irregularly spelled words.	*3.6 Students are expected to build upon and continue applying previous learning.*	

Standard 4: Read with sufficient accuracy and fluency to support comprehension.

4.1 Students are expected to build upon and continue applying previous learning. ***Grade1*** *Read grade-level text with purpose and understanding.*	
4.2 Read grade-level prose and poetry orally with accuracy, appropriate rate, expression, intonation, and phrasing on successive readings.	*Students are expected to build upon and continue applying previous learning.*

4.3 Students are expected to build upon and continue applying previous learning. ***Grade 1*** *Use context to confirm or self-correct word recognition and understanding, rereading as necessary.*

Meaning and Context (MC)

Standard 5: Determine meaning and develop logical interpretations by making predictions, inferring, drawing conclusions, analyzing, synthesizing, providing evidence, and investigating multiple interpretations.

GRADE THREE	GRADE FOUR	GRADE FIVE
5.1 Ask and answer literal and inferential questions to determine meaning; refer explicitly to the text to support inferences and conclusions.	5.1 Ask and answer inferential questions to analyze meaning beyond the text; refer to details and examples within a text to support inferences and conclusions.	5.1 Quote accurately from a text to analyze meaning in and beyond the text.
5.2 *Students are expected to build upon and continue applying previous learning.* ***Grade 2*** *Make predictions before and during reading; confirm or modify thinking.*		

Standard 6: Summarize key details and ideas to support analysis of central ideas.

6.1 Summarize multi-paragraph texts using key details to support the central idea.	6.1 Summarize multi-paragraph texts using key details to support the central idea.	6.1 Summarize a text with two or more central ideas; cite key supporting details.

Standard 7: Research events, topics, ideas, or concepts through multiple media, formats, and in visual, auditory, and kinesthetic modalities.

7.1 Compare and contrast diverse texts on the same topic, idea, or concept.	7.1 Compare and contrast how events, topics, concepts, and ideas are depicted in primary and secondary sources.	7.1 Compare and contrast how events, topics, concepts, and ideas are depicted in primary and secondary sources.

Language, Craft, and Structure (LCS)

Standard 8: Interpret and analyze the author's use of words, phrases, text features, conventions, and structures, and how their relationships shape meaning and tone in print and multimedia texts.

GRADE THREE	GRADE FOUR	GRADE FIVE
8.1 Explain how the author uses words and phrases to inform, explain, or describe.	8.1 Determine how the author uses words and phrases to shape and clarify meaning.	8.1 Analyze how the author uses words and phrases to shape and clarify meaning.
8.2 Use knowledge of appendices, timelines, maps, and charts to locate information and gain meaning; explain how these features contribute to a text.	8.2 Apply knowledge of text features to gain meaning; describe the relationship between these features and the text.	8.2 Apply knowledge of text features in multiple sources to gain meaning or solve a problem.

Standard 9: Apply a range of strategies to determine and deepen the meaning of known, unknown, and multiple-meaning words, phrases, and jargon; acquire and use general academic and domain-specific vocabulary.

9.1 Use paragraph-level context to determine the meaning of words and phrases.	9.1 Use definitions, examples, and restatements to determine the meaning of words or phrases.	9.1 Use the overall meaning of a text or word's position or function to determine the meaning of a word or phrase.
9.2 Determine the meaning of a word when an affix is added to a base word.	9.2 Determine the meaning of an unknown word using knowledge of base words and Greek and Latin affixes.	9.2 Determine the meaning of an unknown word using knowledge of base words and Greek and Latin affixes.
9.3 *Students are expected to build upon and continue applying previous learning.* ***Grade 2*** *Use a base word to determine the meaning of an unknown word with the same base.*		
9.4 Consult print and multimedia resources to find the pronunciation and determine or clarify the precise meaning of key words or phrases.	*Students are expected to build upon and continue applying previous learning.*	
9.5 Acquire and use general academic and domain-specific words and phrases that signal spatial and temporal relationships; demonstrate an understanding of nuances.	9.5 Acquire and use general academic and domain-specific words or phrases that signal precise actions, emotions, and states of being; demonstrate an understanding of nuances and jargon.	*Students are expected to build upon and continue applying previous learning.*

Standard 10: Analyze and provide evidence of how the author's choice of purpose and perspective shapes content, meaning, and style.

10.1 State the author's purpose; distinguish one's own perspective from that of the author.	10.1 Identify and describe the difference between a primary and secondary account of the same event or topic.	10.1 Compare and contrast a primary and secondary account of the same event or topic.

Standard 11: Analyze and critique how the author uses structures in print and multimedia texts to craft informational and argument writing.

11.1 Identify problem and solution, description, and question and answer structures to locate information and gain meaning.	11.1 Apply knowledge of text structures to describe how structures contribute to meaning.	11.1 Apply knowledge of text structures across multiple texts to locate information and gain meaning.
11.2 Describe the structures an author uses to support specific points.	11.2 Explain how an author uses reasons and evidence to support particular points.	11.2 Explain how an author uses reasons and evidence to support particular points, identifying which reasons and evidence support which points.

Range and Complexity

Standard 12: Read independently and comprehend a variety of texts for the purposes of reading for enjoyment, acquiring new learning, and building stamina; reflect and respond to increasingly complex text over time.

GRADE THREE	GRADE FOUR	GRADE FIVE
12.1 Engage in whole and small group reading with purpose and understanding.	12.1 Engage in whole and small group reading with purpose and understanding.	12.1 Engage in whole and small group reading with purpose and understanding.
12.2 Read independently for sustained periods of time.	12.2 Read independently for sustained periods of time.	12.2 Read independently for sustained periods of time.
12.3 Read and respond according to task and purpose to become self-directed, critical readers and thinkers.	12.3 Read and respond according to task and purpose to become self-directed, critical readers and thinkers.	12.3 Read and respond according to task and purpose to become self-directed, critical readers and thinkers.

Writing (W)

Expectations for Teaching and Learning
Learning should be modeled, supported, and reflect gradual release of responsibility at all levels.
Teachers should continue to address earlier standards as they apply to more complex text.
Students are expected to build upon and continue applying concepts learned previously.

Fundamentals of Writing

- Employ a recursive writing process that includes planning, drafting, revising, editing, rewriting, publishing, and reflecting.
- Interact and collaborate with peers and adults to develop and strengthen writing.
- Produce writing in which the development, organization, and style are appropriate to task, purpose, discipline, and audience.
- Use clear and coherent written language to accomplish a purpose such as learning, enjoyment, argument, and the exchange of information.
- Monitor progress throughout the writing process and adjust strategies as needed from independence to collaboration within a writing community.
- Incorporate authors' craft techniques observed from wide reading of anchor and mentor texts across disciplines to inform, explain, convince/argue, and entertain.

Meaning, Context, and Craft (MCC)

Standard 1: Write arguments to support claims with clear reasons and relevant evidence.

GRADE THREE	GRADE FOUR	GRADE FIVE
1.1 Write opinion pieces that: a. introduce the topic or text, state an opinion, and create an organizational structure that includes reasons; b. use information from multiple print and multimedia sources; c. organize supporting reasons logically; d. use transitional words or phrases to connect opinions and reasons; e. use paraphrasing and original language to avoid plagiarism; and f. provide a concluding statement or section.	1.1 Write opinion pieces that: a. introduce a topic or text clearly, state an opinion, and create an organizational structure in which related ideas are grouped to support the writer's purpose; b. use information from multiple print and multimedia sources; c. provide reasons supported by facts and details; d. use transitional words or phrases to connect opinions and reasons; e. use paraphrasing, quotations, and original language to avoid plagiarism; and	1.1 Write arguments that: a. introduce a topic or text clearly, state a claim, and create an organizational structure in which related ideas are grouped to support the writer's purpose; b. use information from multiple print and multimedia sources; c. provide logically ordered reasons supported by relevant facts and details; d. use transitional words, phrases, and clauses to connect claim and reasons; e. use paraphrasing, summarizing, quotations, and original language to avoid

	f. provide a concluding statement or section related to the opinion presented.	plagiarism; and f. provide a concluding statement or section related to the claim presented.

Standard 2: Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.

2.1 Write informative/explanatory texts that: a. introduce a topic and group related information together; b. use information from multiple print and multimedia sources; c. include illustrations to aid comprehension; d. develop the topic with facts, definitions, and details; e. use paraphrasing and original language to avoid plagiarism; f. use transition words and phrases to connect ideas within categories of information; g. develop a style and tone authentic to the purpose; and h. provide a concluding statement or section.	2.1 Write informative/explanatory texts that: a. introduce a topic clearly; b. use information from multiple print and multimedia sources; c. group related information in paragraphs and sections; d. include formatting, illustrations, and multimedia to aid comprehension; e. develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic; f. use paraphrasing, quotations, and original language to avoid plagiarism; g. link ideas within categories of information using words and phrases; h. use precise language and domain-specific vocabulary to inform or explain the topic; i. develop a style and tone authentic to the purpose; and j. provide a concluding statement or section relate to the information or explanation presented.	2.1 Write informative/explanatory texts that: a. introduce a topic clearly; b. use relevant information from multiple print and multimedia sources; c. provide a general observation and focus; d. group related information logically; e. use credible sources; f. include formatting, illustrations, and multimedia to aid comprehension; g. develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic; h. use paraphrasing, quotations, summarizing, and original language to avoid plagiarism; i. link ideas within and across categories of information using words, phrases, and clauses; j. use precise language and domain-specific vocabulary to inform or explain the topic; k. develop a style and tone authentic to the purpose; and l. provide a concluding statement or section related to the information or explanation presented.

Standard 3: Write narratives to develop real or imagined experiences or events using effective techniques, well-chosen details, and well-structured event sequences.

3.1 Gather ideas from texts, multimedia, and personal experience to write narratives that: a. develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences; b. establish a situation and introduce a narrator and/or characters; c. organize an event sequence that unfolds naturally; d. use dialogue and descriptions of actions, thoughts, and feelings to develop experiences and events or show the response of characters to situations; e. use temporal words and phrases to signal event order; f. use imagery, precise words, and sensory details to develop characters and convey experiences and events; and g. provide a sense of closure.	3.1 Gather ideas from texts, multimedia, and personal experience to write narratives that: a. develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences; b. orient the reader by establishing a situation and introducing a narrator and/or characters; c. organize an event sequence that unfolds naturally; d. use dialogue and description to develop experiences and events or show the responses of characters to situations; e. use a variety of transitional words and phrases to manage the sequence of events; f. use imagery, precise words, and sensory details to develop characters and convey experiences and events precisely; and g. provide a conclusion that follows from the narrated experiences or events.	3.1 Gather ideas from texts, multimedia, and personal experience to write narratives that: a. develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences; b. orient the reader by establishing a situation and introducing a narrator and/or characters; c. organize an event sequence that unfolds naturally; d. use dialogue, pacing, and manipulation of time to develop experiences and events or show the responses of characters to situations; e. use a variety of transitional words, phrases, and clauses to manage the sequence of events; f. use imagery, precise words, and sensory details to develop characters and convey experiences and events precisely; and g. provide a conclusion that follows from the narrated experiences or events.

Language (L)

Standard 4: Demonstrate command of the conventions of standard English grammar and usage when writing and speaking.

GRADE THREE	GRADE FOUR	GRADE FIVE
4.1 When writing: a. show knowledge of the function of nouns, pronouns, verbs, adjectives, and adverbs; b. form and use regular and irregular plural nouns; use abstract nouns; c. form and use regular and irregular verbs;	4.1 When writing: a. use relative pronouns and relative adverbs; b. form and use the progressive verb tenses; c. use modal auxiliaries to convey various conditions; d. use modal auxiliaries and the progressive	4.1 When writing: a. show knowledge of the function of conjunctions, prepositions, and interjections; b. form and use the perfect verb tenses; c. use verb tense to convey various times, sequences, states, and conditions; d. recognize and use appropriate continuity or

d. form and use the simple verb tenses; e. ensure subject-verb and pronoun-antecedent agreement; f. form and use comparative and superlative adjectives and adverbs, and choose between them depending on what is to be modified; g. form and use prepositional phrases; h. use coordinating and subordinating conjunctions; and i. produce simple, compound, and complex sentences.	verb tenses, recognizing and correcting inappropriate shifts in verb tense; e. order adjectives within sentences according to conventional patterns; f. use relative pronouns and relative adverbs; g. explore using prepositional phrases in different positions within a sentence; h. use coordinating and subordinating conjunctions; i. use a variety of sentence types to produce complete sentences, recognizing and correcting inappropriate fragments and run-ons; and j. use frequently confused homonyms correctly.	shifts in verb tense; and e. use correlative conjunctions.

Standard 5: Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

5.1 Capitalize appropriate words in titles, historical periods, company names, product names, and special events.	5.1 Capitalize names of magazines, newspapers, works of art, musical compositions, organizations, and the first word in quotations.	5.1 Apply correct usage of capitalization.
5.2 Use: a. apostrophes to form contractions and singular and plural possessives; b. quotation marks to mark direct speech; and c. commas in locations and addresses, to mark direct speech, and with coordinating adjectives.	5.2 Use: a. apostrophes to form possessives and contractions; b. quotation marks and commas to mark direct speech; and c. commas before a coordinating conjunction in a compound sentence.	5.2 Use: a. apostrophes and quotation marks; and b. commas for appositives, to set off the words *yes* and *no*, to set off a tag question from the rest of the sentence, and to indicate direct address.
5.3 Use conventional spelling for high-frequency words, previously studied words, and for adding suffixes to base words.	*5.3 Students are expected to build upon and continue applying previous learning.*	
5.4 Use spelling patterns and generalizations.	5.4 Use spelling patterns and generalizations.	*5.4 Students are expected to build upon and continue applying previous learning.*

5.5 Consult print and multimedia sources to check and correct spellings.	*5.5 Students are expected to build upon and continue applying previous learning.*

Range and Complexity (RC)

Standard 6: Write independently, legibly, and routinely for a variety of tasks, purposes, and audiences over short and extended time frames.

GRADE THREE	GRADE FOUR	GRADE FIVE
6.1 Write routinely and persevere in writing tasks: a. over short and extended time frames; b. for a range of domain-specific tasks; c. for a variety of purposes and audiences; and d. by adjusting the writing process for the task, increasing the length and complexity.	6.1 Write routinely and persevere in writing tasks: a. over short and extended time frames; b. for a range of domain-specific tasks; c. for a variety of purposes and audiences; and d. by adjusting the writing process for the task, increasing the length and complexity.	6.1 Write routinely and persevere in writing tasks: a. over short and extended time frames; b. for a range of domain-specific tasks; c. for a variety of purposes and audiences; and d. by adjusting the writing process for the task, increasing the length and complexity.
6.2 Students are expected to build upon and continue applying previous learning. ***Grade 1*** *Print upper- and lower-case letters proportionally using appropriate handwriting techniques.*		
6.3 Students are expected to build upon and continue applying previous learning. ***Grade 1*** *Write left to right leaving space between words.*		
6.4 Continue to develop effective keyboarding skills.	6.4 Demonstrate effective keyboarding skills.	*Students are expected to build upon and continue applying previous learning.*
6.5 Connect upper- and lower-case letters efficiently and proportionately in cursive handwriting.	*Students are expected to build upon and continue applying previous learning.*	

Communication (C)

Expectations for Teaching and Learning
Learning should be modeled, supported, and reflect gradual release of responsibility at all levels.
Teachers should continue to address earlier standards as they apply to more complex text.
Students are expected to build upon and continue applying concepts learned previously.

Fundamentals of Communication

- Employ a reciprocal communication process that includes planning, drafting, revising, editing, reviewing, presenting, and reflecting.
- Communicate using style, language, and nonverbal cues appropriate to task, purpose, and audience.
- Use active and attentive communication skills, building on other's ideas to explore, learn, enjoy, argue, and exchange information.
- Monitor delivery and reception throughout the communication process and adjust approach and strategies as needed.
- Adjust speech, using standard English when indicated or appropriate, in a variety of contexts and tasks for presenting or participating in the social exchange of ideas.
- Acquire vocabulary from multiple forms of communication; use newly acquired vocabulary to appropriately communicate in a variety of situations and contexts.

Meaning and Context (MC)

Standard 1: Interact with others to explore ideas and concepts, communicate meaning, and develop logical interpretations through collaborative conversations; build upon the ideas of others to clearly express one's own views while respecting diverse perspectives.

GRADE THREE	GRADE FOUR	GRADE FIVE
1.1 Explore and create meaning through conversation and interaction with peers and adults.	1.1 Explore and create meaning by formulating questions, engaging in purposeful dialogue with peers and adults, sharing ideas and considering alternate viewpoints.	1.1 Consider viewpoints of others by listening, reflecting, and formulating questions before articulating personal contributions.
1.2 Participate in discussions; ask questions to acquire information concerning a topic, text, or issue.	1.2 Participate in discussions; ask and respond to questions to acquire information concerning a topic, text, or issue.	1.2 Participate in discussions; ask and respond to probing questions to acquire and confirm information concerning a topic, text, or issue.
1.3 Apply techniques of articulation, adequate volume, eye contact, facial expressions, posture, gestures, and space; take one's	1.3 Apply techniques of articulation, adequate volume, eye contact, facial expressions, posture, gestures, and space; take one's	1.3 Apply effective communication techniques and the use of formal or informal voice based on audience and setting.

own turn in a respectful way.	own turn in a respectful way.	
1.4 Engage in focused conversations about grade appropriate topics and texts; build on ideas of others to clarify thinking and express new thoughts.	1.4 Engage in focused conversations about grade appropriate topics and texts; build on the ideas of others, and pose specific questions, and respond to clarify thinking and express new thoughts.	1.4 Engage in focused conversations about grade appropriate topics and texts; build on the ideas of others, and pose specific questions, and respond to clarify thinking and express new thoughts.
1.5 Explain personal ideas and build on the ideas of others by responding and relating to comments made in multiple exchanges.	1.5 Explain personal ideas and build on the ideas of others by responding and relating to comments made in multiple exchanges.	1.5 Explain personal ideas while building on the ideas of others to demonstrate understanding of diverse perspectives.
1.6 This indicator does not begin until English 1. ***English 1*** *Utilize various modes of communication to present a clear, unique interpretation of diverse perspectives.*		

Standard 2: Articulate ideas, claims, and perspectives in a logical sequence using information, findings, and credible evidence from sources.

2.1 Recall information from experiences and gather information from print and multimedia sources; take brief notes from sources, categorize, and organize.	2.1 Articulate ideas, perspectives and information with details and supporting evidence in a logical sequence with a clear introduction, body, and conclusion.	2.1 Analyze ideas, perspectives and information using examples and supporting evidence related to the topic.
2.2 Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details.	2.2 Discuss the purpose and the credibility of information presented in diverse media and formats.	2.2 Analyze the credibility of information presented in diverse media and formats.
2.3 Speak clearly at an understandable pace, adapting speech to a variety of contexts and tasks; use standard English when indicated or appropriate.	*2.3 Students are expected to build upon and continue applying previous learning.*	

Standard 3: Communicate information through strategic use of multiple modalities and multimedia to enrich understanding when presenting ideas and information.

3.1 Compare how ideas and topics are depicted in a variety of media and formats.	3.1 Compare and contrast how ideas and topics are depicted in a variety of media and formats.	3.1 Compare and contrast how ideas and topics are depicted in a variety of media and formats.
3.2 Create presentations using video, photos, and other multimedia elements to support communication and clarify ideas, thoughts, and feelings.	3.2 Create presentations using videos, photos, and other multimedia elements to support communication and clarify ideas, thoughts, and feelings.	3.2 Create presentations that integrate visual displays and other multimedia to enrich the presentation.

Language, Craft, and Structure (LCS)

Standard 4: Critique how a speaker addresses content and uses stylistic and structural craft techniques to inform, engage, and impact audiences.

GRADE THREE	GRADE FOUR	GRADE FIVE
4.1 Identify style a speaker uses to present content.	4.1 Identify presentation style a speaker uses to enhance the development of central idea or theme.	4.1 Identify a speaker's claim and determine the effectiveness of how each point is presented to support the claim.
4.2 Determine if the presentation has a purposeful organizational strategy, with appropriate transitions.	4.2 Determine if the presentation has a purposeful organizational strategy, with appropriate transitions.	4.2 Identify the speaker's use of chronological, cause/effect, problem/solution, and compare/contrast relationships to convey messages.
4.2 Identify why the speaker: a. uses intonation and word stress; b. includes media; c. addresses the audience; d. determines word choice; and e. incorporates figurative language and literary devices.	4.3 Identify how and why the speaker: a. uses intonation and word stress; b. includes media; c. addresses the audience; d. determines word choice; and e. incorporates figurative language and literary devices.	4.3 Identify how and why the speaker: a. uses intonation and word stress; b. includes media; c. addresses the audience; d. determines word choice; and e. incorporates figurative language and literary devices.

Standard 5: Incorporate craft techniques to engage and impact audience and convey messages.

5.1 Set a purpose and integrate craft techniques to create presentations.	5.1 Set a purpose and integrate craft techniques to create presentations.	5.1 Set a purpose, integrate craft techniques and maintain a clear focus in presentations.
5.2 Employ metaphor, imagery, personification, and hyperbole when appropriate to impact the audience.	5.2 Employ hyperbole, imagery, personification, idioms, adages, and proverbs when appropriate to convey messages.	5.2 Articulate clearly a message using figurative language, dialogue, idioms, adages, proverbs, and imagery when appropriate to impact the audience.
5.3 This indicator does not begin until English 1. ***English 1*** *Develop messages that use logical, emotional, and ethical appeals.*		

Disciplinary Literacy

Reading, writing, communicating, thinking critically, and performing in meaningful, relevant ways within and across disciplines are essential practices for accessing and deeply understanding content. Immersion in the language and thinking processes valued by each discipline guides students to develop and cultivate a deeper understanding of particular disciplines.

College- and career-ready students must be able to expertly navigate curriculum, paying close attention to practices unique to a particular discipline. Disciplinary Literacy works in concert with Inquiry-Based Literacy Standards to prepare students for the demands of the 21st century. These practices also offer opportunities for students to demonstrate their understanding of the content in traditional and non-traditional ways.

The *South Carolina College- and Career-Ready Standards for English Language Arts 2015* include the Disciplinary Literacy practices listed below:

- **Read, write, and communicate using knowledge of a particular discipline.**
- **Integrate the Reading, Writing, and Communication Standards and the Inquiry-Based Literacy Standards to communicate and create understanding within content areas.**
- **Extend and deepen understanding of content through purposeful, authentic, real-world tasks to show understanding and integration of content within and across disciplines.**

Grade Six through Eight
Standards and Indicators

State Board Approved – First Reading January 21, 2015

Inquiry-Based Literacy Standards (I)

Standard 1: Formulate relevant, self-generated questions based on interests and/or needs that can be investigated.

GRADE SIX	GRADE SEVEN	GRADE EIGHT
1.1 Develop questions to broaden thinking on a specific idea that frames inquiry for new learning and deeper understanding.	1.1 Develop questions to broaden thinking on a specific idea that frames inquiry for new learning and deeper understanding.	1.1 Develop a range of questions to frame inquiry for new learning and deeper understanding.

Standard 2: Transact with texts to formulate questions, propose explanations, and consider alternative views and multiple perspectives.

2.1 Transact with text in order to formulate logical questions based on evidence, generate explanations, propose and present conclusions, and consider multiple perspectives.	2.1 Formulate logical questions based on evidence, generate explanations, propose and present original conclusions, and consider multiple perspectives.	2.1 Formulate logical questions based on evidence, generate explanations, propose and present original conclusions, and consider multiple perspectives.

Standard 3: Construct knowledge, applying disciplinary concepts and tools, to build deeper understanding of the world through exploration, collaboration, and analysis.

3.1 Develop a plan of action by using appropriate discipline-specific strategies.	3.1 Develop a plan of action by using appropriate discipline-specific strategies.	3.1 Develop a plan of action by using appropriate discipline-specific strategies.
3.2 Examine historical, social, cultural, or political context to broaden inquiry.	3.2 Examine historical, social, cultural, or political context to broaden inquiry.	3.2 Examine historical, social, cultural, or political context to broaden inquiry.
3.3 Gather information from a variety of-primary and secondary sources and evaluate sources for perspective, validity, and bias.	3.3 Gather information from a variety of-primary and secondary sources and evaluate sources for perspective, validity, and bias.	3.3 Gather information from a variety of primary and secondary sources and evaluate sources for perspective, validity, and bias.
3.4 Organize and categorize important information, revise ideas, and report relevant findings.	3.4 Organize and categorize important information, revise ideas, and report relevant findings.	3.4 Organize and categorize important information, revise ideas, and report relevant findings.

Standard 4: Synthesize integrated information to share learning and/or take action.

4.1 Employ a critical stance to demonstrate that relationships and patterns of evidence lead to logical conclusions, while acknowledging alternative views.	4.1 Employ a critical stance to demonstrate that relationships and patterns of evidence lead to logical conclusions, while acknowledging alternative views.	4.1 Employ a critical stance to demonstrate that relationships and patterns of evidence lead to logical conclusions, while acknowledging alternative views.

4.2 Determine appropriate disciplinary tools and develop a plan to communicate findings and/or take informed action.	4.2 Determine appropriate disciplinary tools and develop a plan to communicate findings and/or take informed action.	4.2 Determine appropriate disciplinary tools and develop a plan to communicate findings and/or take informed action.
4.3 Reflect on findings and pose appropriate questions for further inquiry.	4.3 Reflect on findings and pose appropriate questions for further inquiry.	4.3 Reflect on findings and pose appropriate questions for further inquiry.

Standard 5: Reflect throughout the inquiry process to assess metacognition, broaden understanding, and guide actions, both individually and collaboratively.

5.1 Acknowledge and value individual and collective thinking; use feedback from peers and adults to guide the inquiry process.	5.1 Acknowledge and value individual and collective thinking; use feedback from peers and adults to guide the inquiry process.	5.1 Acknowledge and value individual and collective thinking and using feedback from peers and adults to guide the inquiry process.
5.2 Employ past and present learning in order to monitor and guide inquiry.	5.2 Employ past and present learning in order to monitor and guide inquiry.	5.2 Employ past and present learning in order to monitor and guide inquiry.
5.3 Assess the processes-to revise strategies, address misconceptions, anticipate and overcome obstacles, and reflect on completeness of the inquiry.	5.3 Assess the processes to revise strategies, address misconceptions, anticipate and overcome obstacles, and reflect on completeness of the inquiry.	5.3 Assess the processes to revise strategies, address misconceptions, anticipate and overcome obstacles, and reflect on completeness of the inquiry.

Reading – Literary Text

Expectations for Teaching and Learning
Learning should be modeled, supported, and reflect gradual release of responsibility at all levels.
Teachers should continue to address earlier standards as they apply to more complex text.
Students are expected to build upon and continue applying concepts learned previously.

By the end of grade eight, students read four major types of literary texts in print and multimedia formats: fiction, literary nonfiction, poetry, and drama. In the category of fiction, they read the following specific types of texts: chapter books, adventure stories, historical fiction, contemporary realistic fiction, science fiction, folktales, tall tales, and myths. In the category of literary nonfiction, they read personal essays, classical essays, memoirs, autobiographical and biographical sketches, character sketches, and speeches. In the category of poetry, they read narrative poems, lyrical poems, humorous poems, free verse, odes, songs/ballads, and epics.

Fundamentals of Reading

- Integrate an information (cueing) system that includes meaning (semantics), structure (syntax), visual (graphophonic), and pragmatics (schematic) to make meaning from text.
- Gain understanding by applying reading strategies of monitoring, searching, confirming, cross-checking, rereading and self-correcting.
- Employ comprehension strategies before, during, and after reading text using schema, annotating, questioning, visualizing, drawing inferences, determining importance, summarizing, and synthesizing.
- Use metacognition to monitor meaning and adjust strategies while reading.
- Notice and analyze the styles and techniques authors use to help readers construct meaning.

Principles of Reading (P)

Standard 1: Demonstrate understanding of the organization and basic features of print.

GRADE SIX	GRADE SEVEN	GRADE EIGHT
1.1 Students are expected to build upon and continue applying previous learning. ***Grade 1*** *Recognize the distinguishing features of a sentence.*		
1.2 Students are expected to build upon and continue applying previous learning. ***Kindergarten*** *Recognize that spoken words are represented in written language by specific sequences of letters.*		
1.3 Students are expected to build upon and continue applying previous learning. ***Kindergarten*** *Understand that words are separated by spaces in print.*		
1.4 Students are expected to build upon and continue applying previous learning. ***Kindergarten*** *Recognize and name all upper- and lowercase letters of the alphabet.*		

Standard 2: Demonstrate understanding of spoken words, syllables, and sounds

2.1 Students are expected to build upon and continue applying previous learning. ***Grade 1*** *Distinguish long from short vowel sounds in spoken single-syllable words.*
2.2 Students are expected to build upon and continue applying previous learning. ***Grade 1*** *Orally produce single-syllable words by blending sounds including consonant blends in spoken words.*
2.3 Students are expected to build upon and continue applying previous learning. ***Grade 1*** *Isolate and pronounce initial, medial vowel, and final sounds in spoken single-syllable words.*
2.4 Students are expected to build upon and continue applying previous learning. ***Grade 1*** *Segment spoken single-syllable words into their complete sequence of individual sounds.*
2.5 Students are expected to build upon and continue applying previous learning. ***Kindergarten*** *Add or substitute individual sounds in simple, one-syllable words to make new words.*

Standard 3: Know and apply grade-level phonics and word analysis skills in decoding words.

3.1 Students are expected to build upon and continue applying previous learning. ***Grade 4*** *Use combined knowledge of all letter-sound correspondences, syllabication patterns, base words, and affixes to read accurately unfamiliar multisyllabic words in context and out of context.*
3.2 Students are expected to build upon and continue applying previous learning. ***Grade 2*** *Use knowledge of how syllables work to read multisyllabic words.*
3.3 Students are expected to build upon and continue applying previous learning. ***Grade 2*** *Read irregularly spelled two-syllable words and words with common prefixes and suffixes.*
3.4 Students are expected to build upon and continue applying previous learning. ***Grade 2*** *Use and apply knowledge of vowel diphthongs.*
3.5 Students are expected to build upon and continue applying previous learning. ***Grade 2*** *Use and apply knowledge of how inflectional endings change words.*
3.6 Students are expected to build upon and continue applying previous learning. ***Grade 3*** *Read grade-appropriate irregularly spelled words.*

Standard 4: Read with sufficient accuracy and fluency to support comprehension.

4.1 Students are expected to build upon and continue applying previous learning. ***Grade 2*** *Read grade-level text with purpose and understanding.*
4.2 Students are expected to build upon and continue applying previous learning. ***Grade 4*** *Read grade-level prose and poetry orally with accuracy, appropriate rate, expression, intonation, and phrasing on successive readings.*
4.3 Students are expected to build upon and continue applying previous learning. ***Grade 1*** *Use context to confirm or self-correct word recognition and understanding, rereading as necessary.*

Meaning and Context (MC)

Standard 5: Determine meaning and develop logical interpretations by making predictions, inferring, drawing conclusions, analyzing, synthesizing, providing evidence, and investigating multiple interpretations.

GRADE SIX	GRADE SEVEN	GRADE EIGHT
5.1 Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	5.1 Cite multiple examples of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	5.1 Cite the evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.
5.2 Students are expected to build upon and continue applying previous learning. ***Grade 2*** *Make predictions before and during reading; confirm or modify thinking.*		

Standard 6: Summarize key details and ideas to support analysis of thematic development.

6.1 Determine a theme of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.	6.1 Determine one or more themes and analyze the development; provide an objective summary.	6.1 Determine one or more themes and analyze the development and relationships to character, setting, and plot over the course of a text; provide an objective summary.

Standard 7: Analyze the relationship among ideas, themes, or topics in multiple media, formats, and in visual, auditory, and kinesthetic modalities.

7.1 Compare and contrast a narrative, drama, or poem read to an audio, video, or live version of the same text.	7.1 Interpret how a literary text relates to diverse media with an emphasis on the effect various media techniques have on ideas, themes, and topics.	7.1 Analyze how a visual or audio adaptation of a narrative or drama modifies or embellishes the text.
7.2 Compare and contrast texts in different forms or genres in terms of their approaches to similar themes and topics.	7.2 Compare and contrast a literary depiction of a time, place, or character to a historical account of the same period to understand how authors use or alter history for rhetorical effect.	7.2 Analyze how a modern work of fiction draws on themes, patterns of events, or character types from myths, traditional stories, or religious works, describing how the material is rendered new.

Standard 8: Analyze characters, settings, events, and ideas as they develop and interact within a particular context.

8.1 Describe how a plot in a narrative or drama unfolds and how characters respond or change as the plot moves toward a resolution; determine the impact of contextual influences on setting, plot and characters.	8.1 Analyze how setting shapes the characters and/or plot and how particular elements of a narrative or drama interact; determine the impact of contextual influences on setting, plot, and characters.	8.1 Analyze how dialogue and/or incidents propel the action, reveal aspects of a character, or provoke a decision; determine the impact of contextual influences on setting, plot and characters.

Language, Craft, and Structure (LCS)

Standard 9: Interpret and analyze the author's use of words, phrases, and conventions, and how their relationships shape meaning and tone in print and multimedia texts.

GRADE SIX	GRADE SEVEN	GRADE EIGHT
9.1 Determine the figurative and connotative meaning of words and phrases as they are used in text; analyze the impact of specific word choice on meaning and tone.	9.1 Determine the figurative and connotative meaning of words and phrases as they are used in text; analyze the impact of rhymes and other repetitions of sounds on specific verses or stanzas of poems or sections of narrative or drama.	9.1 Determine the figurative and connotative meanings of words and phrases as they are used in text; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts.
9.2 Analyze the author's word and convention choices and draw conclusions about how they impact meaning and tone.	9.2 Analyze the impact of the author's choice of words, word phrases, and conventions on meaning and tone.	*Students are expected to build upon and continue applying previous learning*

Standard 10: Apply a range of strategies to determine the meaning of known, unknown, and multiple-meaning words, phrases, and jargon; acquire and use general academic and domain-specific vocabulary.

10.1 Use the overall meaning of a text or a word's position or function to determine the meaning of a word or phrase.	*10.1 Students are expected to build upon and continue applying previous learning.*
10.2 Students are expected to build upon and continue applying previous learning. ***Grade 4*** *Determine the meaning of an unknown word using knowledge of base words and Greek and Latin affixes.*	
10.3 Students are expected to build upon and continue applying previous learning. ***Grade 2*** *Use a base word to determine the meaning of an unknown word with the same base.*	
10.4. Students are expected to build upon and continue applying previous learning. ***Grade 5*** *Consult print and multimedia resources to find the pronunciation and determine or clarify the precise meaning of key words or phrases.*	
10.5 Acquire and use general academic and domain-specific words or phrases that signal precise actions, emotions, and states of being; demonstrate an understanding of nuances and jargon.	*10.5 Students are expected to build upon and continue applying previous learning.*

Standard 11: Analyze and provide evidence of how the author's choice of point of view, perspective or purpose shapes content, meaning, and style.

11.1 Explain how an author's development of the point of view of the narrator or speaker impacts content, meaning, and style.	11.1 Analyze how an author develops and contrasts points of view to impact content, meaning, and style.	11.1 Analyze how the author's development of the differences in points of view between the characters and the reader create suspense or humor.
11.2 Students are expected to build upon and continue applying previous learning. ***Grade 3*** *Compare and contrast the reader's point of view to that of the narrator or a character.*		

Standard 12: Analyze and critique how the author uses structures in print and multimedia texts to shape meaning and impact the reader.

12.1 Analyze how a particular sentence, chapter, scene, or stanza fits into the overall structure of a text and contributes to the development of the theme, setting, or plot.	12.1 Analyze how complex text structures in prose, drama, and poetry contribute to development of theme, setting, or plot.	12.1 Compare and contrast the structure of two or more texts with similar topics or themes and analyze how the differing structure of each contributes to meaning.
12.2 Compare and contrast how different text structures contribute to meaning and impact the reader.	12.2 Analyze the author's choice of structures within the text and draw conclusions about how they impact meaning.	12.2 Analyze the author's choice of structures within the text and draw conclusions about how they impact meaning.

Range and Complexity (RC)

Standard 13: Read independently and comprehend a variety of texts for the purposes of reading for enjoyment, acquiring new learning, and building stamina; reflect on and respond to increasingly complex text over time.

GRADE SIX	GRADE SEVEN	GRADE EIGHT
13.1 Engage in whole and small group reading with purpose and understanding through teacher modeling and gradual release of responsibility.	13.1 Engage in whole and small group reading with purpose and understanding through teacher modeling and gradual release of responsibility.	13.1 Engage in whole and small group reading with purpose and understanding through teacher modeling and gradual release of responsibility.
13.2 Read independently for sustained periods of time to build stamina.	13.2 Read independently for sustained periods of time to build stamina.	13.2 Read independently for sustained periods of time to build stamina.
13.3 Read and respond to grade level text to become self-directed, critical readers, and thinkers.	13.3 Read and respond to grade level text to become self-directed, critical readers, and thinkers.	13.3 Read and respond to grade level text to become self-directed, critical readers, and thinkers.

Reading – Informational Text (RI)

Expectations for Teaching and Learning
Learning should be modeled, supported, and reflect gradual release of responsibility at all levels.
Teachers should continue to address earlier standards as they apply to more complex text.
Students are expected to build upon and continue applying concepts learned previously.

By the end of grade eight, students read informational (expository/persuasive/argumentative) texts in multimedia formats of the following types: essays, historical documents, research reports, contracts, position statements, informational trade books, textbooks, news and feature articles, magazine articles, advertisements, encyclopedia entries, book, movie, or product reviews, journals, and speeches. They also read directions, schedules, and recipes embedded in informational texts. In addition, they examine commercials, documentaries, and other forms of multimedia informational texts.

Fundamentals of Reading

- Integrate an information (cueing) system that includes meaning (semantics), structure (syntax), visual (graphophonic), and pragmatics (schematic) to make meaning from text.
- Gain understanding by applying reading strategies of monitoring, searching, confirming, cross-checking, rereading and self-correcting.
- Employ comprehension strategies before, during, and after reading text using schema, annotating, questioning, visualizing, drawing inferences, determining importance, summarizing, and synthesizing.
- Use metacognition to monitor meaning and adjust strategies while reading.
- Notice and analyze an author's style and techniques to construct meaning.

Principles of Reading (P)

Standard 1: Demonstrate understanding of the organization and basic features of print.

GRADE SIX	GRADE SEVEN	GRADE EIGHT
1.1 Students are expected to build upon and continue applying previous learning. ***Grade 1*** *Recognize the distinguishing features of a sentence.*		
1.2 Students are expected to build upon and continue applying previous learning. ***Kindergarten*** *Recognize that spoken words are represented in written language by specific sequences of letters.*		
1.3 Students are expected to build upon and continue applying previous learning. ***Kindergarten*** *Understand that words are separated by spaces in print.*		
1.4 Students are expected to build upon and continue applying previous learning. ***Kindergarten*** *Recognize and name all upper- and lowercase letters of the alphabet.*		

Standard 2: Demonstrate understanding of spoken words, syllables, and sounds

2.1 Students are expected to build upon and continue applying previous learning. ***Grade 1*** *Distinguish long from short vowel sounds in spoken single-syllable words.*
2.2 Students are expected to build upon and continue applying previous learning. ***Grade 1*** *Orally produce single-syllable words by blending sounds including consonant blends in spoken words.*
2.3 Students are expected to build upon and continue applying previous learning. ***Grade 1*** *Isolate and pronounce initial, medial vowel, and final sounds in spoken single-syllable words.*
2.4 Students are expected to build upon and continue applying previous learning. ***Grade 1*** *Segment spoken single-syllable words into their complete sequence of individual sounds.*
2.5 Students are expected to build upon and continue applying previous learning. ***Kindergarten*** *Add or substitute individual sounds in simple, one-syllable words to make new words.*

Standard 3: Know and apply grade-level phonics and word analysis skills in decoding words.

3.1 Students are expected to build upon and continue applying previous learning. ***Grade 4*** *Use combined knowledge of all letter-sound correspondences, syllabication patterns, base words, and affixes to read accurately unfamiliar multisyllabic words in context and out of context.*
3.2 Students are expected to build upon and continue applying previous learning. ***Grade 2*** *Use knowledge of how syllables work to read multisyllabic words.*
3.3 Students are expected to build upon and continue applying previous learning. ***Grade 2*** *Read irregularly spelled two-syllable words and words with common prefixes and suffixes.*
3.4 Students are expected to build upon and continue applying previous learning. ***Grade 2*** *Use and apply knowledge of vowel diphthongs.*
3.5 Students are expected to build upon and continue applying previous learning. ***Grade 2*** *Use and apply knowledge of how inflectional endings change words.*
3.6 Students are expected to build upon and continue applying previous learning. ***Grade 3*** *Read grade-appropriate irregularly spelled words.*

Standard 4: Read with sufficient accuracy and fluency to support comprehension.

4.1 Read grade-level text with purpose and understanding.	4.1 Read grade-level text with purpose and understanding.	4.1 Read grade-level text with purpose and understanding.
4.2 Read grade-level prose and poetry orally with accuracy, appropriate rate, expression, intonation, and phrasing on successive readings.	4.2 Read grade-level prose and poetry orally with accuracy, appropriate rate, expression, intonation, and phrasing on successive readings.	4.2 Read grade-level prose and poetry orally with accuracy, appropriate rate, expression, intonation, and phrasing on successive readings.

4.3 Use context to confirm or self-correct word recognition and understanding, rereading as necessary.	4.3 Use context to confirm or self-correct word recognition and understanding, rereading as necessary.	4.3 Use context to confirm or self-correct word recognition and understanding, rereading as necessary.

Meaning and Context (MC)

Standard 5: Determine meaning and develop logical interpretations by making predictions, inferring, drawing conclusions, analyzing, synthesizing, providing evidence, and investigating multiple interpretations.

GRADE SIX	GRADE SEVEN	GRADE EIGHT
5.1 Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	5.1 Cite multiple examples of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	5.1 Cite the evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.
5.2 Students are expected to build upon and continue applying previous learning. ***Grade 2*** *Make predictions before and during reading; confirm or modify thinking.*		

Standard 6: Summarize key details and ideas to support analysis of central ideas.

6.1 Provide an objective summary of a text with two or more central ideas; cite key supporting details.	6.1 Provide an objective summary of a text with two or more central ideas; cite key supporting details to analyze their development.	6.1 Provide an objective summary of a text with two or more central ideas; cite key supporting details to analyze their development.

Standard 7: Research events, topics, ideas, or concepts through multiple media, formats, and in visual, auditory, and kinesthetic modalities.

7.1 Integrate information presented in different media or formats to develop a coherent understanding of a topic or issue.	7.1 Compare and contrast a text to an audio, video, or multimedia version of the text, analyzing each medium's portrayal of the subject.	7.1 Evaluate the advantages and disadvantages of using different mediums to present a particular topic or idea.

Language, Craft, and Structure (LCS)

Standard 8: Interpret and analyze the author's use of words, phrases, text features, conventions, and structures, and how their relationships shape meaning and tone in print and multimedia texts.

GRADE SIX	GRADE SEVEN	GRADE EIGHT
8.1 Determine figurative, connotative, and technical meanings of words and phrases used in a text; analyze the impact of specific word choice on meaning and tone.	8.1 Determine figurative, connotative, and technical meanings of words and phrases used in a text; analyze the impact of specific words or phrases on meaning and tone.	8.1 Determine figurative, connotative, and technical meanings of words and phrases used in a text; analyze the impact of specific words, phrases, analogies, or allusions on meaning and tone.

8.2 Identify text features and structures that support an author's ideas or claim.	8.2 Determine the impact of text features and structures on an author's ideas or claim.	8.2 Analyze the impact of text features and structures on authors' similar ideas or claims about the same topic.

Standard 9: Apply a range of strategies to determine and deepen the meaning of known, unknown, and multiple meaning words, phrases, and jargon; acquire and use general academic and domain-specific vocabulary.

9.1 Determine the meaning of a word or phrase using the overall meaning of a text or a word's position or function.	*9.1 Students are expected to build upon and continue applying previous learning.*
9.2 Determine or clarify the meaning of a word or phrase using knowledge of word patterns, origins, bases, and affixes.	9.2 *Students are expected to build upon and continue applying previous learning.*
9.3 Students are expected to build upon and continue applying previous learning. ***Grade 2*** *Use a base word to determine the meaning of an unknown word with the same base.*	
9.4 Students are expected to build upon and continue applying previous learning. ***Grade 4*** *Consult print and multimedia resources to find the pronunciation and determine or clarify the precise meaning of key words or phrases.*	
9.5 Students are expected to build upon and continue applying previous learning. ***Grade 5*** *Acquire and use general academic and domain specific words or phrases that signal contrast, addition, and logical relationships; demonstrate and understanding of nuances and jargon.*	

Standard 10: Analyze and provide evidence of how the author's choice of purpose or perspective shapes content, meaning, and style.

10.1 Analyze multiple accounts of the same event or topic, noting important similarities and differences in the perspective represented.	10.1 Determine an author's perspective or purpose and analyze how the author distinguishes his/her position from others.	10.1 Determine an author's perspective or purpose and analyze how the author acknowledges or responds to conflicting evidence or viewpoints.

Standard 11: Analyze and critique how the author uses structures in print and multimedia texts to craft informational and argument writing.

11.1 Identify text features and structures that support an author's idea or claim.	11.1 Determine the impact of text features and structures on an author's ideas or claims.	11.1 Analyze the impact of text features and structures on authors' similar ideas or claims about the same topic.
11.2 Trace and evaluate the argument and specific claims, distinguishing claims that are supported by reasons and evidence from claims that are not.	11.2 Trace and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient to support the claims.	11.2 Analyze and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient; recognize when irrelevant evidence is introduced.

Range and Complexity (RC)

Standard 12: Read independently and comprehend a variety of texts for the purposes of reading for enjoyment, acquiring new learning and building stamina; reflect and respond to increasingly complex text over time.

GRADE SIX	GRADE SEVEN	GRADE EIGHT
12.1 Engage in whole and small group reading with purpose and understanding.	12.1 Engage in whole and small group reading with purpose and understanding.	12.1 Engage in whole and small group reading with purpose and understanding.
12.2 Read independently for sustained periods of time.	12.2 Read independently for sustained periods of time.	12.2 Read independently for sustained periods of time.
12.3 Read and respond according to task and purpose to become self-directed, critical readers and thinkers.	12.3 Read and respond according to task and purpose to become self-directed, critical readers and thinkers.	12.3 Read and respond according to task and purpose to become self-directed, critical readers and thinkers.

Writing (W)

Expectations for Teaching and Learning
Learning should be modeled, supported, and reflect gradual release of responsibility at all levels.
Teachers should continue to address earlier standards as they apply to more complex text.
Students are expected to build upon and continue applying concepts learned previously.

Fundamentals of Writing

- Employ a recursive writing process that includes planning, drafting, revising, editing, rewriting, publishing, and reflecting.
- Interact and collaborate with peers and adults to develop and strengthen writing.
- Produce writing in which the development, organization, and style are appropriate to task, purpose, discipline, and audience.
- Use clear and coherent written language to accomplish a purpose such as learning, enjoyment, argument, and the exchange of information.
- Monitor progress throughout the writing process and adjust strategies as needed from independence to collaboration within a writing community.
- Incorporate authors' craft techniques observed from wide reading of anchor and mentor texts across disciplines to inform, explain, convince/argue, and entertain.

Meaning, Context, and Craft (MCC)

Standard 1: Write arguments to support claims with clear reasons and relevant evidence.

GRADE SIX	GRADE SEVEN	GRADE EIGHT
1.1 Write arguments that: a. introduce a focused claim and organize reasons and evidence clearly; b. use information from multiple print and multimedia sources; c. support claims with clear reasons and relevant evidence, using credible sources and demonstrating an understanding of the topic or text; d. use an organizational structure that provides unity and clarity among claims, reasons, and evidence; e. paraphrase, quote, and summarize,	1.1 Write arguments that: a. introduce claims, acknowledge alternate or opposing claims, and organize the reasons and evidence logically; b. use relevant information from multiple print and multimedia sources; c. support claims with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text; d. use an organizational structure that provides unity and clarity among claims, reasons, and evidence;	1.1 Write arguments that: a. introduce claims, acknowledge and distinguish the claims from alternate or opposing claims, and organize the reasons and evidence logically; b. use relevant information from multiple print and multimedia sources; c. support claims using valid reasoning and a variety of relevant evidence from accurate, verifiable sources; d. use an organizational structure that provides unity and clarity among claims, counterclaims, reasons, and evidence;

avoiding plagiarism and providing basic bibliographic information for sources; f. establish and maintain a formal style; and g. provide a conclusion that follows from and supports the argument.	e. develop the claim providing credible evidence and data for each; f. paraphrase, quote, and summarize, avoiding plagiarism and following a standard format for citation; g. establish and maintain a formal style and objective tone; and h. provide a concluding statement or section that follows from and supports the argument.	e. develop the claim and counterclaims providing credible evidence and data for each; f. paraphrase, quote, and summarize, avoiding plagiarism and following a standard format for citation; g. establish and maintain a formal style and objective tone; and h. provide a concluding statement or section that follows from and supports the argument.

Standard 2: Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.

2.1 Write informative/explanatory texts that: a. introduce a focused topic; b. use relevant information from multiple print and multimedia sources; c. use definition, classification, comparison/contrast, and cause/effect structures to organize ideas, concepts, and information; d. use credible sources; e. include formatting, graphics, and multimedia to aid comprehension; f. develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples; g. paraphrase, quote, and summarize to avoid plagiarism; h. follow a standard format for citation; i. use appropriate transitions to clarify the relationships among ideas and concepts; j. use precise language and domain-specific vocabulary to inform or explain the topic; k. establish and maintain a style and tone	2.1 Write informative/explanatory texts that: a. introduce a topic clearly, previewing what is to follow; b. use relevant information from multiple print and multimedia sources; c. use definition, classification, comparison/contrast, and cause/effect structures to organize ideas, concepts, and information; d. use credible sources; e. include formatting, graphics, and multimedia to aid comprehension; f. develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples; g. paraphrase, quote, and summarize to avoid plagiarism; h. follow a standard format for citation; i. use appropriate transitions to create cohesion and clarify the relationships among ideas and concepts; j. use precise language and domain-specific	2.1 Write informative/explanatory texts that: a. introduce a topic; b. use relevant information from multiple print and multimedia sources; c. organize ideas, concepts, and information into broader categories; d. assess the credibility of each source; e. include formatting, graphics, and multimedia to aid comprehension; f. develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples; g. paraphrase, quote, and summarize to avoid plagiarism; h. follow a standard format for citation; i. use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts; j. use precise language and domain-specific vocabulary to explain the topic; k. establish and maintain a style and tone

authentic to the purpose; and l. provide a concluding statement or section that follows the information or explanation presented.	vocabulary to inform or explain the topic; k. establish and maintain a style and tone authentic to the purpose; and l. provide a concluding statement or section that follows and supports the information or explanation presented.	authentic to the purpose; and l. provide a concluding statement or section that follows and supports the information or explanation presented.

Standard 3: **Write narratives to develop real or imagined experiences or events using effective techniques, well-chosen details, and well-structured event sequences.**

3.1 Gather ideas from texts, multimedia, and personal experience to write narratives that: a. develop real or imagined experiences or events using effective techniques, relevant descriptive details, and well-structured event sequences; b. engage and orient the reader by establishing a context and introducing a narrator and/or characters; c. organize an event sequence that unfolds naturally and logically; d. use dialogue, pacing, and manipulation of time to develop experiences, events, and/or characters; e. use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another; f. use imagery, precise words and phrases, relevant descriptive details, and sensory language to convey experiences and events and develop characters; and g. provide a conclusion that follows from and reflects on the narrated experiences or events.	3.1 Gather ideas from texts, multimedia, and personal experience to write narratives that: a. develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences; b. engage and orient the reader by establishing a context and point of view and introducing a narrator and/or characters; c. organize an event sequence that unfolds naturally and logically; d. use dialogue, pacing, and manipulation of time to develop experiences, events, and/or characters; e. use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another; f. use imagery, precise words and phrases, relevant descriptive details, and sensory language to capture the action, convey experiences and events and develop characters; and g. provide a conclusion that follows from and reflects on narrated experiences or events.	3.1 Gather ideas from texts, multimedia, and personal experience to write narratives that: a. develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences; b. engage and orient the reader by establishing a context and point of view and introducing a narrator and/or characters; c. organize an event sequence that unfolds naturally and logically; d. use dialogue, pacing, manipulation of time, and reflection, to develop experiences, events, and/or characters; e. use a variety of transition words, phrases, and clauses to convey sequence, signal shifts from one time frame or setting to another, and show the relationships among experiences and events; f. use imagery, precise words and phrases, relevant descriptive details, and sensory language to capture the action, convey experiences and events, and develop characters; and g. provide a conclusion that follows from and reflects on the narrated experiences or events.

Language (L)

Standard 4: Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

GRADE SIX	GRADE SEVEN	GRADE EIGHT
4.1 When writing: a. ensure that subjective, objective, and possessive pronouns are in the proper case; b. use intensive pronouns; c. recognize and use appropriate continuity and shifts in pronoun number and person; d. recognize and correct pronouns with unclear or ambiguous antecedents; e. recognize variations from standard English in one's own and others' writing; and f. identify and use strategies to improve expression in conventional language.	4.1 When writing: a. show knowledge of the function of phrases and clauses in general and their function in specific sentences; b. choose among simple, compound, complex, and compound-complex sentences to signal differing relationships among ideas; and c. use phrases and clauses within a sentence, recognizing and correcting misplaced and dangling modifiers.	4.1 When writing: a. show knowledge of the function of gerunds, participles, and infinitives and their functions in particular sentences; b. form and use verbs in the active and passive voice; c. form and use verbs in the indicative, imperative, interrogative, conditional, and subjunctive mood; and d. recognize and correct inappropriate shifts in verb voice and mood.

Standard 5: Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

5.1 Students are expected to build upon and continue applying previous learning. ***Grade 5*** *Apply correct usage of capitalization in writing.*		
5.2 Use: a. commas, parentheses, or dashes to set off nonrestrictive/parenthetical elements; and b. semicolons to connect main clauses and colons to introduce a list or quotation.	5.2 Use: a. a comma to separate coordinate adjectives; and b. a comma after introductory subordinate clauses.	5.2 Use: a. commas, ellipses, and dashes to indicate a pause, break, or omission; and b. an ellipsis to indicate an omission.
5.3 Students are expected to build upon and continue applying previous learning. ***Grade 3*** *Use conventional spelling for high-frequency words, previously studied words, and for adding suffixes to base words.*		
5.4 Students are expected to build upon and continue applying previous learning. ***Grade 4*** *Use spelling patterns and generalizations.*		
5.5 Students are expected to build upon and continue applying previous learning. ***Grade 3*** *Consult print and multimedia resources to check and correct spelling.*		

Range and Complexity (RC)

Standard 6: Write independently, legibly, and routinely for a variety of tasks, purposes, and audiences over short and extended time frames.

GRADE SIX	GRADE SEVEN	GRADE EIGHT
6.1 Write routinely and persevere in writing tasks over short and extended time frames, for a range of domain specific tasks, and for a variety of purposes and audiences.	6.1 Write routinely and persevere in writing tasks over short and extended time frames, for a range of domain specific tasks, and for a variety of purposes and audiences.	6.1 Write routinely and persevere in writing tasks over short and extended time frames, for a range of domain specific tasks, and for a variety of purposes and audiences.
6.2 Students are expected to build upon and continue applying previous learning. ***Grade 2*** *Print upper- and lower-case letters proportionally using appropriate handwriting techniques.*		
6.3 Students are expected to build upon and continue applying conventions previous learning. ***Grade 1*** *Write left to right leaving spaces between words.*		
6.3 Students are expected to build upon and continue applying previous learning. ***Grade 4*** *Demonstrate effective keyboarding skills.*		
6.5 *Students are expected to build upon and continue applying previous learning.* ***Grade 5*** *Connect upper- and lowercase letters efficiently and proportionately in cursive handwriting.*		

Communication (C)

Expectations for Teaching and Learning
Learning should be modeled, supported, and reflect gradual release of responsibility at all levels.
Teachers should continue to address earlier standards as they apply to more complex text.
Students are expected to build upon and continue applying concepts learned previously.

Fundamentals of Communication

- Employ a reciprocal communication process that includes planning, drafting, revising, editing, reviewing, presenting, and reflecting.
- Communicate using style, language, and nonverbal cues appropriate to task, purpose, and audience.
- Use active and attentive communication skills, building on other's ideas to explore, learn, enjoy, argue, and exchange information.
- Monitor delivery and reception throughout the communication process and adjust approach and strategies as needed.
- Adjust speech, using standard English when indicated or appropriate, in a variety of contexts and tasks for presenting or participating in the social exchange of ideas.
- Acquire vocabulary from multiple forms of communication; use newly acquired vocabulary to appropriately communicate in a variety of situations and contexts.

Meaning and Context (MC)

Standard 1: Interact with others to explore ideas and concepts, communicate meaning, and develop logical interpretations through collaborative conversations; build upon the ideas of others to clearly express one's own views while respecting diverse perspectives.

GRADE SIX	GRADE SEVEN	GRADE EIGHT
1.1 Consider viewpoints of others by listening, reflecting, and formulating questions; support others to reach common understandings of concepts, ideas, and text.	1.1 Prepare for and engage in conversations to explore complex concepts, ideas, and texts; share ideas and consider alternate viewpoints.	1.1 Prepare for and engage in conversations to explore complex ideas, concepts, and texts; build coherent lines of thinking.
1.2 Participate in discussions; ask and respond to probing questions to acquire and confirm information concerning a topic, text, or issue.	1.2 Participate in discussions; ask probing questions and share evidence that supports and maintains the focus of the discussion.	1.2 Participate in discussions; share evidence that supports the topic, text, or issue; connect the ideas of several speakers and respond with relevant ideas, evidence, and observations.

1.3 Apply effective communication techniques and the use of formal or informal voice based on audience and setting.	1.3 Apply effective communication techniques and the use of formal or informal voice based on audience, setting, and tasks.	1.3 Apply effective communication techniques based on a variety of contexts and tasks.
1.4 Engage in focused conversations about grade appropriate topics and texts; build on the ideas of others, and pose and respond to specific questions to clarify thinking and express new thoughts.	1.4 Engage in a range of collaborative discussions about grade appropriate topics; acknowledge new information expressed by others and when necessary modify personal ideas.	1.4 Engage in a range of collaborative discussions about grade appropriate topics; acknowledge new information expressed by others and when necessary modify personal ideas.
1.5 Review and reflect upon the main ideas expressed to demonstrate an understanding of diverse perspectives.	1.5 Consider new ideas and diverse perspectives of others when forming opinions regarding a topic, text, or issue.	1.5 Consider new ideas and diverse perspectives of others when forming opinions; qualify or justify views based on evidence presented regarding a topic, text, or issue.
1.6 Indicator does not begin until English 1. ***English 1*** *Utilize various modes of communication to present a clear, unique interpretation of diverse perspectives.*		

Standard 2: Articulate ideas, claims, and perspectives in a logical sequence using information, findings, and credible evidence from sources.

2.1 Gather information from print and multimedia sources to articulate claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details that support themes or central ideas to express perspectives clearly.	2.1 Gather relevant information from diverse print and multimedia sources to articulate claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions facts and details.	2.1 Gather relevant information from diverse print and multimedia sources to develop ideas, claims, or perspectives emphasizing salient points in a coherent, concise, logical manner with relevant evidence and well-chosen details.
2.2 Distinguish between credible and non-credible sources of information.	2.2 Analyze and evaluate the credibility of information and accuracy of findings.	2.2 Analyze and evaluate credibility of information and accuracy of findings.
2.3 Quote or paraphrase the data and conclusions of others while avoiding plagiarism and providing basic bibliographic information for sources.	2.3 Quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.	2.3 Quote and paraphrase the data and conclusions while avoiding plagiarism and following a standard format for citation.
2.4 Adapt speech to a variety of contexts and tasks, using standard English when indicated or appropriate.	*2.4 Students are expected to build upon and continue applying previous learning.*	

Standard 3: Communicate information through strategic use of multiple modalities, visual displays, and multimedia to enrich understanding when presenting ideas and information.

3.1 Analyze the impact of selected media and formats on meaning.	*Students are expected to build upon and continue applying previous learning.*	
3.2 Utilize multimedia to enrich presentations.	3.2 Utilize multimedia to clarify information and strengthen claims or evidence.	3.2 Utilize multimedia to clarify information and emphasize salient points.

Language, Craft, and Structure (LCS)

Standard 4: Critique how a speaker addresses content and uses stylistic and structural craft techniques to inform, engage, and impact audiences.

GRADE SIX	GRADE SEVEN	GRADE EIGHT
4.1 Determine the effectiveness of a speaker's argument and specific claims, distinguishing claims that are supported by reasons and evidence from claims that are not.	4.1 Determine the effectiveness of a speaker's argument and specific claims, evaluating the soundness of the reasoning and the relevance and sufficiency of the evidence.	4.1 Determine the effectiveness of a speaker's argument and specific claims, evaluating the soundness of the reasoning and relevance and sufficiency of the evidence and identifying when irrelevant evidence is introduced.
4.2 Identify the speaker's use of chronological, cause/effect, problem/solution, and compare/contrast relationships to convey messages.	4.2 Analyze the effectiveness of the speaker's use of chronological, cause/effect, problem/solution, and compare/contrast relationships to convey messages.	4.2 Analyze the effectiveness of the speaker's use of chronological, cause/effect, problem/solution, and compare/contrast relationships to convey messages.
4.3 Determine how the speaker: a. articulates a clear message; b. monitors audience awareness; c. addresses possible misconceptions or objections; d. chooses appropriate media; and e. uses an appropriate style for the audience.	4.3 Analyze the presentation to determine how the speaker: a. articulates a clear message; b. monitors audience awareness; c. addresses possible misconceptions or objections; d. chooses appropriate media; and e. uses an appropriate style for the audience.	4.3 Evaluate the presentation to determine how the speaker: a. articulates a clear message; b. monitors audience awareness; c. addresses possible misconceptions or objections; d. chooses appropriate media; and e. uses an appropriate style for the audience.

Standard 5: Incorporate craft techniques to engage and impact audience and convey messages.

5.1 Consider audience when selecting presentation types.	5.1 Consider audience when selecting presentation types	5.1 Consider audience when selecting presentation types.
5.2 Select and integrate craft techniques to impact audience.	5.2 Select and employ a variety of craft techniques to convey a message and	5.2 Select and employ a variety of craft techniques to convey a message and

	impact the audience.	impact the audience.
5.3 This indicator does not begin until English 1. ***English 1*** *Develop messages that use logical, emotional, and ethical appeals.*		

Disciplinary Literacy (DL)

Reading, writing, communicating, thinking critically, and performing in meaningful, relevant ways within and across disciplines are essential practices for accessing and deeply understanding content. Immersion in the language and thinking processes valued by each discipline guides students to develop and cultivate a deeper understanding of particular disciplines.

College- and career-ready students must be able to expertly navigate curriculum, paying close attention to practices unique to a particular discipline. Disciplinary Literacy works in concert with Inquiry-Based Literacy Standards to prepare students for the demands of the 21st century. These practices also offer opportunities for students to demonstrate their understanding of the content in traditional and non-traditional ways.

The *South Carolina College- and Career-Ready Standards for English Language Arts 2015* include the Disciplinary Literacy practices listed below:

- **Read, write, and communicate using knowledge of a particular discipline.**
- **Integrate the Reading, Writing, and Communication Standards and the Inquiry-Based Literacy Standards to communicate and create understanding within content areas.**
- **Extend and deepen understanding of content through purposeful, authentic, real-world tasks to show understanding and integration of content within and across disciplines.**

English 1 through English 4
Standards and Indicators

State Board Approved – First Reading January 21, 2015

Inquiry-Based Literacy Standards (I)

Standard 1: Formulate relevant, self-generated questions based on interests and/or needs that can be investigated.

ENGLISH 1	ENGLISH 2	ENGLISH 3	ENGLISH 4
1.1 Use a recursive process to develop, evaluate, and refine, questions to broaden thinking on a specific idea that directs inquiry for new learning and deeper understanding.	1.1 Use a recursive process to develop, refine, and evaluate questions to broaden thinking on a specific idea that directs inquiry for new learning and deeper understanding.	1.1 Use a recursive process to develop, refine, and evaluate of questions to broaden thinking on a specific idea that directs inquiry for new learning and deeper understanding.	1.1 Use a recursive process to develop, refine, and evaluate questions to broaden thinking on a specific idea that directs inquiry for new learning and deeper understanding.

Standard 2: Transact with texts to formulate questions, propose explanations, and consider alternative views and multiple perspectives.

2.1 Analyze ideas and information from text and multimedia by formulating questions, proposing interpretations and explanations, and considering multiple perspectives and alternative views.	2.1 Analyze ideas and information from text and multimedia by formulating questions, proposing interpretations and explanations, and considering multiple perspectives and alternative views.	2.1 Analyze ideas and information from text and multimedia by formulating questions, proposing interpretations and explanations, and considering multiple perspectives and alternative views.	2.1 Analyze ideas and information from text and multimedia by formulating questions, proposing interpretations and explanations, and considering multiple perspectives and alternative views.

Standard 3: Construct knowledge, applying disciplinary concepts and tools, to build deeper understanding of the world through exploration, collaboration, and analysis.

3.1 Develop a plan of action by using appropriate discipline-specific strategies.	3.1 Develop a plan of action by using appropriate discipline-specific strategies.	3.1 Develop a plan of action by using appropriate discipline-specific strategies.	3.1 Develop a plan of action by using appropriate discipline-specific strategies.
3.2 Examine historical, social, cultural, or political context to broaden inquiry.	3.2 Examine historical, social, cultural, or political context to broaden inquiry.	3.2 Examine historical, social, cultural, or political context to broaden inquiry.	3.2 Examine historical, social, cultural, or political context to broaden inquiry.
3.3 Gather information from a variety of primary and secondary sources and evaluate for perspective, validity, and bias.	3.3 Gather information from a variety of primary and secondary sources and evaluate for perspective, validity, and bias.	3.3 Gather information from a variety of primary and secondary sources and evaluate for perspective, validity, and bias.	3.3 Gather information from a variety of primary and secondary sources and evaluate for perspective, validity, and bias.

3.4 Organize and categorize important information; synthesize relevant ideas to build a deeper understanding; communicate new learning; identify implications for future inquiry.	3.4 Organize and categorize important information; synthesize relevant ideas to build a deeper understanding; communicate new learning; and identify implications for future inquiry.	3.4 Organize and categorize important information; synthesize relevant ideas to build a deeper understanding; communicate new learning; and identify implications for future inquiry.	3.4 Organize and categorize important information; synthesize relevant ideas to build a deeper understanding; communicate new learning; and identify implications for future inquiry.

Standard 4: Synthesize information to share learning and/or take action.

4.1 Employ a critical stance to analyze relationships and patterns of evidence to confirm conclusions.	4.1 Employ a critical stance to analyze relationships and patterns of evidence to confirm conclusions.	4.1 Employ a critical stance to analyze relationships and patterns of evidence to confirm conclusions.	4.1 Employ a critical stance to analyze relationships and patterns of evidence to confirm conclusions.
4.2 Evaluate findings; address conflicting information; identify misconceptions; and revise.	4.2 Evaluate findings; address conflicting information; identify misconceptions; and revise.	4.2 Evaluate findings; address conflicting information; identify misconceptions; and revise.	4.2 Evaluate findings; address conflicting information; identify misconceptions; and revise.
4.3 Determine appropriate disciplinary tools to communicate findings and/or take informed action.	4.3 Determine appropriate disciplinary tools to communicate findings and/or take informed action.	4.3 Determine appropriate disciplinary tools to communicate findings and/or take informed action.	4.3 Determine appropriate disciplinary tools to communicate findings and/or take informed action.

Standard 5: Reflect throughout the inquiry process to assess metacognition, broaden understanding, and guide actions, both individually and collaboratively.

5.1 Acknowledge and consider individual and collective thinking; use feedback to guide the inquiry process.	5.1 Acknowledge and consider individual and collective thinking; use feedback to guide the inquiry process.	5.1 Acknowledge and consider individual and collective thinking; use feedback to guide the inquiry process.	5.1 Acknowledge and consider individual and collective thinking; use feedback to guide the inquiry process.
5.2 Analyze and evaluate previous assumptions; test claims; predict outcomes; and justify results to guide future action.	5.2 Analyze and evaluate previous assumptions; test claims; predict outcomes; and justify results to guide future action.	5.2 Analyze and evaluate previous assumptions; test claims; predict outcomes; and justify results to guide future action.	5.2 Analyze and evaluate previous assumptions; test claims; predict outcomes; and justify results to guide future action.
5.3 Analyze the process to evaluate and revise plan and strategies; address successes and	5.3 Analyze the process to evaluate and revise plan and strategies; address successes	5.3 Analyze the process to evaluate and revise plan and strategies; address successes	5.3 Analyze the process to evaluate and revise plan and strategies; address successes

misconceptions; and apply learning to future inquiry.	and misconceptions; and apply learning to future inquiry.	and misconceptions; and apply learning to future inquiry.	and misconceptions; and apply learning to future inquiry.

Reading - Literary Text

Expectations for Teaching and Learning
Learning should be modeled, supported, and reflect gradual release of responsibility at all levels.
Teachers should continue to address earlier standards as they apply to more complex text.
Students are expected to build upon and continue applying concepts learned previously.

By the end of English 4, students read four major types of literary texts in print and multimedia formats: fiction, literary nonfiction, poetry, and drama. In the category of fiction, they read the following specific types of texts: adventure stories, historical fiction, contemporary realistic fiction, myths, satires, parodies, allegories, and monologues. In the category of literary nonfiction, they read classical essays, memoirs, autobiographical and biographical sketches, and speeches. In the category of poetry, they read narrative poems, lyrical poems, humorous poems, free verse, odes, songs/ballads, and epics.

Fundamentals of Reading

- Integrate an information (cueing) system that includes meaning (semantics), structure (syntax), visual (graphophonic), and pragmatics (schematic) to make meaning from text.
- Gain understanding by applying reading strategies of monitoring, searching, confirming, cross-checking, rereading and self-correcting.
- Employ comprehension strategies before, during, and after reading text using schema, annotating, questioning, visualizing, drawing inferences, determining importance, summarizing, and synthesizing.
- Use metacognition to monitor meaning and adjust strategies while reading.
- Notice and analyze the styles and techniques authors use to help readers construct meaning.

Principles of Reading (P)

Standard 1: Demonstrate understanding of the organization and basic features of print.

ENGLISH 1	ENGLISH 2	ENGLISH 3	ENGLISH 4
1.1 Students are expected to build upon and continue applying previous learning. ***Grade 1*** *Recognize the distinguishing features of a sentence.*			
1.2 Students are expected to build upon and continue applying previous learning. ***Kindergarten*** *Recognize that spoken words are represented in written language by specific sequences of letters.*			
1.3 Students are expected to build upon and continue applying previous learning. ***Kindergarten*** *Understand that words are separated by spaces in print.*			

1.4 Students are expected to build upon and continue applying previous learning. ***Kindergarten*** *Recognize and name all upper- and lowercase letters of the alphabet.*

Standard 2: Demonstrate understanding of spoken words, syllables, and sounds

2.1 Students are expected to build upon and continue applying previous learning. ***Grade 1*** *Distinguish long from short vowel sounds in spoken single-syllable words.*
2.2 Students are expected to build upon and continue applying previous learning. ***Grade 1*** *Orally produce single-syllable words by blending sounds including consonant blends in spoken words.*
2.3 Students are expected to build upon and continue applying previous learning. ***Grade 1*** *Isolate and pronounce initial, medial vowel, and final sounds in spoken single-syllable words.*
2.4 Students are expected to build upon and continue applying previous learning. ***Grade 1*** *Segment spoken single-syllable words into their complete sequence of individual sounds.*
2.5 Students are expected to build upon and continue applying previous learning. ***Kindergarten*** *Add or substitute individual sounds in simple, one-syllable words to make new words.*

Standard 3: Know and apply grade-level phonics and word analysis skills in decoding words.

3.1 Students are expected to build upon and continue applying previous learning. ***Grade 4*** *Use combined knowledge of all letter-sound correspondences, syllabication patterns, base words, and affixes to read accurately unfamiliar multisyllabic words in context and out of context.*
3.2 Students are expected to build upon and continue applying previous learning. ***Grade 2*** *Use knowledge of how syllables work to read multisyllabic words.*
3.3 Students are expected to build upon and continue applying previous learning. ***Grade 2*** *Read irregularly spelled two-syllable words and words with common prefixes and suffixes.*
3.4 Students are expected to build upon and continue applying previous learning. ***Grade 2*** *Use and apply knowledge of vowel diphthongs.*
3.5 Students are expected to build upon and continue applying previous learning. ***Grade 2*** *Use and apply knowledge of how inflectional endings change words.*
3.6 Students are expected to build upon and continue applying previous learning. ***Grade 3*** *Read grade-appropriate irregularly spelled words.*

Standard 4: Read with sufficient accuracy and fluency to support comprehension.

4.1 Read grade-level text with purpose and understanding.	4.1 Read grade-level text with purpose and understanding.	4.1 Read grade-level text with purpose and understanding.	4.1 Read grade-level text with purpose and understanding.
4.2 Read grade-level prose and poetry orally with accuracy, appropriate rate, expression, intonation, and phrasing on	4.2 Read grade-level prose and poetry orally with accuracy, appropriate rate, expression, intonation, and phrasing on	4.2 Read grade-level prose and poetry orally with accuracy, appropriate rate, expression, intonation, and phrasing on	4.2 Read grade-level prose and poetry orally with accuracy, appropriate rate, expression, intonation, and phrasing on

successive readings.	successive readings.	successive readings.	successive readings.
4.3 Use context to confirm or self-correct word recognition and understanding, rereading as necessary.	4.3 Use context to confirm or self-correct word recognition and understanding, rereading as necessary.	4.3 Use context to confirm or self-correct word recognition and understanding, rereading as necessary.	4.3 Use context to confirm or self-correct word recognition and understanding, rereading as necessary.

Meaning and Context (MC)

Standard 5: Determine meaning and develop logical interpretations by making predictions, inferring, drawing conclusions, analyzing, synthesizing, providing evidence, and investigating multiple interpretations.

ENGLISH 1	ENGLISH 2	ENGLISH 3	ENGLISH 4
5.1 Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text; identify multiple supported interpretations.	5.1 Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text; identify multiple supported interpretations.	5.1 Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text including determining where the text leaves matters uncertain; investigate multiple supported academic interpretations.	5.1 Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text including determining where the text leaves matters uncertain; investigate multiple supported academic interpretations.
5.2 Students are expected to build upon and continue applying previous learning. ***Grade 2*** *Make predictions before and during reading; confirm or modify thinking.*			

Standard 6: Summarize key details and ideas to support analysis of thematic development.

6.1 Determine a theme a text and analyze its development over the course of the text including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.	6.1 Determine a central idea of a text and analyze its development over the course of the text including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.	6.1 Analyze the development of related themes across multiple texts citing evidence to support-analysis; provide an objective summary.	6.1 Analyze the development of related themes across a variety of texts citing evidence to support-analysis; provide an objective summary.

Standard 7: Analyze the relationship among ideas, themes, or topics in multiple media, formats, and in visual, auditory, and kinesthetic modalities.

7.1 Trace the development of a	7.1 Trace the development of a	7.1 Analyze the development of	7.1 Analyze the development of

common theme in two different artistic mediums.	common theme across media, modality, and format.	theme across diverse media, modality, and format.	theme across diverse media, modality, and format.
7.2 Investigate how literary texts and related media allude to themes and archetypes from historical and cultural traditions.	7.2 Explain how literary texts and related media allude to themes and archetypes from historical and cultural traditions.	7.2 Analyze how literary texts and related media allude to themes and archetypes from historical and cultural traditions.	7.2 Analyze how literary texts and related media allude to themes and archetypes from historical and cultural traditions.

Standard 8: Analyze characters, settings, events, and ideas as they develop and interact within a particular context.

8.1 Analyze how a series of ideas or events is introduced, developed, connected, and ordered within a particular context.	8.1 Analyze how a series of ideas or events is introduced, developed, connected, and ordered within a particular context.	8.1 Analyze a complex set of ideas or sequence of events and explain how specific characters, ideas, or events develop and interact within a particular context.	8.1 Analyze a complex set of ideas or sequence of events and explain how specific characters, ideas, or events develop and interact within a particular context.

Language, Craft, and Structure (LCS)

Standard 9: Interpret and analyze the author's use of words, phrases, and conventions, and how their relationships shape meaning and tone in print and multimedia texts.

ENGLISH 1	ENGLISH 2	ENGLISH 3	ENGLISH 4
9.1 Determine the figurative and connotative meanings of words and phrases; analyze the cumulative impact of specific word choices on meaning and tone.	9.1 Determine the figurative and connotative meanings of words and phrases; analyze the impact of specific word choices on meaning and tone.	9.1 Analyze and interpret the impact of the author's use of diction, conventions, figurative language, and/or language that is particularly fresh, engaging, or beautiful.	9.1 Evaluate the impact of the author's use of diction, conventions, figurative language, and/or language that is particularly fresh, engaging, or beautiful on meaning and tone.
9.2 *Students are expected to build upon and continue applying previous learning* ***Grade 7*** *Analyze the impact of the author's use of words, word phrases, and conventions on meaning and tone.*			

Standard 10: Apply a range of strategies to determine and deepen the meaning of known, unknown, and multiple-meaning words, phrases, and jargon; acquire and use general academic and domain-specific vocabulary.

10.1 Students are expected to build upon and continue applying previous learning. ***Grade 6*** *Determine the meaning of a word or phrase using the overall meaning of a text or a word's position or function.*
10.2 Students are expected to build upon and continue applying previous learning. ***Grade 5*** *Determine the meaning of an unknown word using knowledge of base words and Greek and Latin affixes.*
10.3 Students are expected to build upon and continue applying previous learning. ***Grade 2*** *Use a base word to determine the meaning of an unknown word with the same base.*
10.4 Students are expected to build upon and continue applying previous learning. ***Grade 5*** *Consult print and multimedia resources to find the pronunciation and determine or clarify the precise meaning of key words or phrases.*
10.5 Students are expected to build upon and continue applying previous learning. ***Grade 6*** *Acquire and use general academic and domain-specific words or phrases that signal contrast, addition, and logical relationships; demonstrate an understanding of nuances and jargon.)*

Standard 11: Analyze and provide evidence of how the author's choice of point of view, perspective, and purpose shape content, meaning, and style.

11.1 Analyze how point of view and author's perspective and purpose shape content, meaning, and style.	11.1 Analyze how point of view and author's perspective and purpose shape content, meaning, and style.	11.1 Analyze how point of view and author's perspective and purpose shape content, meaning, and style, supports rhetorical or aesthetic purposes, and conveys cultural experience.	11.1 Analyze how point of view and author's perspective and purpose shape content, meaning, and style; supports rhetorical or aesthetic purposes; and conveys cultural experience.
11.2 *Students are expected to build upon and continue applying previous learning.* ***Grade 3*** *Compare and contrast the reader's point of view to that of the narrator or a character.*			

Standard 12: Analyze and critique how the author uses structures in print and multimedia texts to shape meaning and impact the reader.

12.1 Determine the significance of the author's use of text structure and plot organization to create mood or effect citing support from the text.	12.1 Analyze how the relationships among structure, plot, and manipulation of time create the effects of mystery, tension, or surprise citing support from the text.	12.1 Analyze the relationships among structure, plot, and manipulation of time to determine how meaning is derived citing support from the text.	12.1 Evaluate various texts to formulate a theory regarding the authors' use of structure, plot, and manipulation of time citing support from the texts.
12.2 Analyze how an author's choices concerning how to	12.2 Analyze how an author's choices concerning how to	12.2 Analyze how an author's choices concerning how to	12.2 Critique how an author's choices concerning how to

structure a text, order events within the text, and manipulate time create different effects.	structure a text, order events within the text, and manipulate time create different effects.	structure texts, order events within the text, and manipulate time create different effects.	structure texts, order events within the text, and manipulate time create different effects.

Range and Complexity (RC)

Standard 13: Read independently and comprehend a variety of texts for the purposes of reading for enjoyment, acquiring new learning, and building stamina; reflect on and respond to increasingly complex text over time.

ENGLISH 1	ENGLISH 2	ENGLISH 3	ENGLISH 4
13.1 Engage in whole and small group reading with purpose and understanding.	13.1 Engage in whole and small group reading with purpose and understanding.	13.1 Engage in whole and small group reading with purpose and understanding.	13.1 Engage in whole and small group reading with purpose and understanding.
13.2 Read independently for sustained periods of time to build stamina.	13.2 Read independently for sustained periods of time to build stamina.	13.2 Read independently for sustained periods of time to build stamina.	13.2 Read independently for sustained periods of time to build stamina.
13.3 Read and respond to grade level text to become self-directed, critical readers and thinkers.	13.3 Read and respond to grade level text to become self-directed, critical readers and thinkers.	13.3 Read and respond to grade level text to become self-directed, critical readers and thinkers.	13.3 Read and respond to grade level text as self-directed, critical readers and thinkers.

Reading - Informational Text (RI)

Expectations for Teaching and Learning
Learning should be modeled, supported, and reflect gradual release of responsibility at all levels.
Teachers should continue to address earlier standards as they apply to more complex text.
Students are expected to build upon and continue applying concepts learned previously.

By the end of English 4, students read informational (expository/persuasive/argumentative) texts in print and multimedia formats of the following types: historical documents, research reports, essays (for example, social, political, scientific, historical, natural history), position papers (for example, persuasive brochures, campaign literature), editorials, letters to the editor, informational trade books, textbooks, news and feature articles, magazine articles, advertisements, journals, speeches, reviews (for example, book, movie, product), contracts, government documents, business forms, instruction manuals, product-support materials, and application forms. They also read directions, schedules, and recipes embedded in informational texts. In addition, they examine commercials, documentaries, and other forms of multimedia texts.

Fundamentals of Reading

- Integrate an information (cueing) system that includes meaning (semantics), structure (syntax), visual (graphophonic), and pragmatics (schematic) to make meaning from text.
- Gain understanding by applying reading strategies of monitoring, searching, confirming, cross-checking, rereading and self-correcting.
- Employ comprehension strategies before, during, and after reading text using schema, annotating, questioning, visualizing, drawing inferences, determining importance, summarizing, and synthesizing.
- Use metacognition to monitor meaning and adjust strategies while reading.
- Notice and analyze the styles and techniques authors use to help readers construct meaning.

Principles of Reading (P)

Standard 1: Demonstrate understanding of the organization and basic features of print.

ENGLISH 1	ENGLISH 2	ENGLISH 3	ENGLISH 4
1.1 Students are expected to build upon and continue applying previous learning. ***Grade 1*** *Recognize the distinguishing features of a sentence.*			
1.2 Students are expected to build upon and continue applying previous learning. ***Kindergarten*** *Recognize that spoken words are represented in written language by specific sequences of letters.*			
1.3 Students are expected to build upon and continue applying previous learning. ***Kindergarten*** *Understand that words are separated by spaces in print.*			

1.4 Students are expected to build upon and continue applying previous learning. ***Kindergarten*** *Recognize and name all upper- and lowercase letters of the alphabet.*

Standard 2: Demonstrate understanding of spoken words, syllables, and sounds

2.1 Students are expected to build upon and continue applying previous learning. ***Grade 1*** *Distinguish long from short vowel sounds in spoken single-syllable words.*
2.2 Students are expected to build upon and continue applying previous learning. ***Grade 1*** *Orally produce single-syllable words by blending sounds including consonant blends in spoken words.*
2.3 Students are expected to build upon and continue applying previous learning. ***Grade 1*** *Isolate and pronounce initial, medial vowel, and final sounds in spoken single-syllable words.*
2.4 Students are expected to build upon and continue applying previous learning. ***Grade 1*** *Segment spoken single-syllable words into their complete sequence of individual sounds.*
2.5 Students are expected to build upon and continue applying previous learning. ***Kindergarten*** *Add or substitute individual sounds in simple, one-syllable words to make new words.*

Standard 3: Know and apply grade-level phonics and word analysis skills in decoding words.

3.1 Students are expected to build upon and continue applying previous learning. ***Grade 4*** *Use combined knowledge of all letter-sound correspondences, syllabication patterns, base words, and affixes to read accurately unfamiliar multisyllabic words in context and out of context.*
3.2 Students are expected to build upon and continue applying previous learning. ***Grade 2*** *Use knowledge of how syllables work to read multisyllabic words.*
3.3 Students are expected to build upon and continue applying previous learning. ***Grade 2*** *Read irregularly spelled two-syllable words and words with common prefixes and suffixes.*
3.4 Students are expected to build upon and continue applying previous learning. ***Grade 2*** *Use and apply knowledge of vowel diphthongs.*
3.5 Students are expected to build upon and continue applying previous learning. ***Grade 2*** *Use and apply knowledge of how inflectional endings change words.*
3.6 Students are expected to build upon and continue applying previous learning. ***Grade 3*** *Read grade-appropriate irregularly spelled words.*

Standard 4: Read with sufficient accuracy and fluency to support comprehension.

4.1 Read grade-level text with purpose and understanding.	4.1 Read grade-level text with purpose and understanding.	4.1 Read grade-level text with purpose and understanding.	4.1 Read grade-level text with purpose and understanding.
4.2 Read grade-level prose and poetry orally with accuracy, appropriate rate, expression,	4.2 Read grade-level prose and poetry orally with accuracy, appropriate rate, expression,	4.2 Read grade-level prose and poetry orally with accuracy, appropriate rate, expression,	4.2 Read grade-level prose and poetry orally with accuracy, appropriate rate, expression,

intonation, and phrasing on successive readings.	intonation, and phrasing on successive readings.	intonation, and phrasing on successive readings.	intonation, and phrasing on successive readings.
4.3 Use context to confirm or self-correct word recognition and understanding, rereading as necessary during independent reading of text.	4.3 Use context to confirm or self-correct word recognition and understanding, rereading as necessary during independent reading of text.	4.3 Use context to confirm or self-correct word recognition and understanding, rereading as necessary during independent reading of text.	4.3 Use context to confirm or self-correct word recognition and understanding, rereading as necessary during independent reading of text.

Meaning and Context (MC)

Standard 5: Determine meaning and develop logical interpretations by making predictions, inferring, drawing conclusions, analyzing, synthesizing, providing evidence and investigating multiple interpretations.

ENGLISH 1	ENGLISH 2	ENGLISH 3	ENGLISH 4
5.1 Cite significant textual evidence in order to articulate explicit meanings and meanings that can be inferred from the text; identify multiple supported interpretations.	5.1 Cite significant textual evidence in order to articulate explicit meanings and meanings that can be inferred from the text; identify multiple supported interpretations.	5.1 Cite significant textual evidence to support synthesis of explicit and inferred meaning and/or in areas the text leaves indeterminate; investigate multiple supported interpretations.	5.1 Cite significant textual evidence to support synthesis of explicit and inferred meaning and/or in areas the text leaves indeterminate; investigate multiple supported interpretations.
5.2 Students are expected to build upon and continue applying previous learning. ***Grade 2*** *Make predictions before and during reading; confirm or modify thinking.*			

Standard 6: Summarize key details and ideas to support analysis of central ideas.

6.1 Determine a central idea of a text and analyze its development over the course of the text including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.	6.1 Determine a central idea of a text and analyze its development over the course of the text including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.	6.1 Determine two or more central ideas of a text and analyze their development over the course of a text including how they interact and build on one another to provide a complex analysis of the topic; provide an objective summary of the text.	6.1 Determine two or more central ideas of a text and analyze their development over the course of a text including how they interact and build on one another to provide a complex analysis of the topic; provide an objective summary of the text.

Standard 7: Research events, topics, ideas, or concepts through multiple media, formats, and in visual, auditory, and kinesthetic modalities.

7.1 Explain how the use of different mediums, modalities, or formats impacts the reader's understanding of events, topics, concepts, and ideas in argument or informative texts.	7.1 Explain how the use of different mediums, modalities, or formats impacts the reader's understanding of events, topics, concepts, and ideas in argument or informative texts.	7.1 Analyze how the use of different mediums, modalities, or formats impacts the reader's understanding of events, topics, concepts, and ideas in argument or informative texts.	7.1 Evaluate the use of different mediums, modalities, or formats impacts the reader's understanding of events, topics, concepts, and ideas in argument or informative texts.

Language, Craft, and Structure (LCS)

Standard 8: Interpret and analyze the author's use of words, phrases, text features, conventions, and structures, and how their relationships shape meaning and tone in print and multimedia texts.

ENGLISH 1	ENGLISH 2	ENGLISH 3	ENGLISH 4
8.1 Determine figurative, connotative, and technical meanings of words and phrases; analyze the impact of specific words, phrases, analogies or allusions on meaning and tone.	8.1 Determine the figurative, connotative, and technical meanings of words and phrases; analyze the cumulative impact of specific words and phrases on meaning and tone.	8.1 Determine the figurative, connotative, and technical meanings of words and phrases; analyze how an author uses and refines words and phrases over the course of a text.	8.1 Determine the figurative, connotative, and technical meanings of words and phrases; compare and contrast how authors use and refine words or phrases.
8.2 Determine how an author uses text features and structures to shape meaning and tone.	8.2 Explain how the author's meaning and tone are developed and refined by text features and structures.	8.2 Analyze and evaluate the effectiveness of the text features and structure an author uses to shape meaning and tone.	8.2 Analyze and evaluate the effectiveness of the text features and structure an author uses to shape meaning and tone.

Standard 9: Apply a range of strategies to determine the meaning of known, unknown, and multiple meaning words, phrases, and jargon; acquire and use general academic and domain-specific vocabulary.

9.1 Students are expected to build upon and continue applying previous learning. ***Grade 6*** *Determine the meaning of a word or phrase using the overall meaning of a text or a word's position or function.*
9.2 Students are expected to build upon and continue applying previous learning. ***Grade 6*** *Determine or clarify the meaning of a word or phrase using knowledge of word patterns, origins, bases and affixes.*
9.3 Students are expected to build upon and continue applying previous learning. ***Grade 2*** *Use a base word to determine the meaning of an unknown word with the same base.*
9.4 Students are expected to build upon and continue applying previous learning. ***Grade 4*** *Consult print and multimedia resources to find the pronunciation and determine or clarify the precise meaning of key words or phrases.*

9.5 Students are expected to build upon and continue applying previous learning. ***Grade 5*** *Acquire and use general academic and domain specific words or phrases that signal contrast, addition, and logical relationships; demonstrate and understanding of nuances and jargon.*
9.3 Students are expected to build upon and continue applying concepts learned previously. ***Grade 5*** *Determine the meaning of an unknown word using knowledge of base words and Greek and Latin affixes.*

Standard 10: Analyze and provide evidence of how the author's choice of purpose and perspective shapes content, meaning, and style.

10.1 Determine an author's point of view or purpose in a text and analyze how an author uses rhetoric to advance that point of view or purpose.	10.1 Determine an author's point of view or purpose in a text and analyze how an author uses rhetoric to advance that point of view or purpose.	10.1 Determine an author's point of view or purpose in a text in which the rhetoric is particularly effective, analyzing how style and content contribute to the power, persuasiveness, or beauty of the text.	10.1 Determine an author's point of view or purpose in a text in which the rhetoric is particularly effective, analyzing how style and content contribute to the power, persuasiveness, or beauty of the text.

Standard 11: Analyze and critique how the author uses structures in print and multimedia texts to craft informational and argument writing.

11.1 Explain how the author's ideas or claims are supported through the use of text features and structures.	11.1 Analyze in detail how the author's ideas or claims are supported through the use of text features and structures.	11.1 Evaluate the effectiveness of the author's use of text features and structures to support a claim.	11.1 Compare and contrast the effectiveness of authors' uses of text features and structures to support similar claims.
11.2 Analyze and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning.	11.2 Analyze and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning.	11.2 Analyze and critique the reasoning in historical, scientific, technical, cultural, and influential argument writing.	11.2 Analyze and critique the reasoning in historical, scientific, technical, cultural, and influential argument writing.

Range and Complexity (RC)

Standard 12: Read independently and comprehend a variety of texts for the purposes of reading for enjoyment, acquiring new learning, and building stamina; reflect on and respond to increasingly complex text over time.

ENGLISH 1	ENGLISH 2	ENGLISH 3	ENGLISH 4
12.1 Engage in whole and small group reading with purpose and understanding through teacher modeling and gradual release of responsibility.	12.1 Engage in whole and small group reading with purpose and understanding through teacher modeling and gradual release of responsibility.	12.1 Engage in whole and small group reading with purpose and understanding through teacher modeling and gradual release of responsibility.	12.1 Engage in whole and small group reading with purpose and understanding through teacher modeling and gradual release of responsibility.
12.2 Read independently for a sustained period of time.	12.2 Read independently for a sustained period of time.	12.2 Read independently for a sustained period of time.	12.2 Read independently for a sustained period of time.
12.3 Read and respond to grade level text to become self-directed, critical readers and thinkers.	12.3 Read and respond to grade level text to become self-directed, critical readers and thinkers.	12.3 Read and respond to grade level text to become self-directed, critical readers and thinkers.	12.3 Read and respond to grade level text to become self-directed, critical readers and thinkers.

Writing (W)

Expectations for Teaching and Learning
Learning should be modeled, supported, and reflect gradual release of responsibility at all levels.
Teachers should continue to address earlier standards as they apply to more complex text.
Students are expected to build upon and continue applying concepts learned previously.

Fundamentals of Writing

- Employ a recursive writing process that includes planning, drafting, revising, editing, rewriting, publishing, and reflecting.
- Interact and collaborate with peers and adults to develop and strengthen writing.
- Produce writing in which the development, organization, and style are appropriate to task, purpose, discipline, and audience.
- Use clear and coherent written language to accomplish a purpose such as learning, enjoyment, argument, and the exchange of information.
- Monitor progress throughout the writing process and adjust strategies as needed from independence to collaboration within a writing community.
- Incorporate authors' craft techniques observed from wide reading of anchor and mentor texts across disciplines to inform, explain, convince/argue, and entertain.

Meaning, Context, and Craft (MCC)

Standard 1: Write arguments to support claims with clear reasons and relevant evidence.

ENGLISH 1	ENGLISH 2	ENGLISH 3	ENGLISH 4
1.1 Write arguments that: a. introduce a precise claim and differentiate between the claim and counterclaims; b. use relevant information from multiple print and multimedia sources; c. assess the credibility and accuracy of each source; d. use an organizational structure that logically sequences and establishes clear relationships among	1.1 Write arguments that: a. introduce a precise claim and differentiate between the claim and counterclaims; b. use relevant information from multiple print and multimedia sources; c. assess the credibility and accuracy of each source; d. use an organizational structure that logically sequences and establishes clear relationships among	1.1 Write arguments that: a. introduce a clearly articulated and well-informed claim, establish the significance of the claim and differentiate between the claim and counterclaims; b. use relevant information from multiple print and multimedia sources; c. assess the credibility and accuracy of each source; d. create an organizational	1.1 Write arguments that: a. introduce a clearly articulated and well-informed claim, establish the significance of the claim and differentiate between the claim and counterclaims; b. use relevant information from multiple print and multimedia sources; c. assess the credibility and accuracy of each source; d. create an organizational

claims, counterclaims, reasons, warrants, and evidence; e. develop the claim and counterclaims ethically without bias, providing credible evidence and accurate interpretation of data for each while delineating the strengths and limitations of the claim and counterclaims; f. quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation; g. avoid logical fallacies and demonstrate an understanding of objectivity and subjectivity; h. provide a concluding statement or section that follows from and supports the argument presented; and i. include a call to action.	claims, counterclaims, reasons, warrants, and evidence; e. develop the claim and counterclaims ethically without bias, providing credible evidence and accurate interpretation of data for each while delineating the strengths and limitations of the claim and counterclaims; f. quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation; g. avoid logical fallacies and demonstrate an understanding of objectivity and subjectivity; h. provide a concluding statement or section that follows from and supports the argument presented; and i. include a call to action.	structure that logically sequences claim(s), counterclaims, reasons, warrants, and evidence; e. develop claim and counterclaims fairly and thoroughly, supplying the most relevant evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience's knowledge level, concerns, values, and possible biases; f. use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claims and reasons, between reasons and evidence, and between claims and counterclaims; g. establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline; h. quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation; i. avoid logical fallacies and demonstrate an	structure that logically sequences claim(s), counterclaims, reasons, warrants, and evidence; e. develop claim and counterclaims fairly and thoroughly, supplying the most relevant evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience's knowledge level, concerns, values, and possible biases; f. use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claims and reasons, between reasons and evidence, and between claims and counterclaims; g. establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline; h. quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation; i. avoid logical fallacies and demonstrate an

		understanding of objectivity and subjectivity; j. provide a concluding statement or section that follows from and supports the argument presented; and k. include a call to action.	understanding of objectivity and subjectivity; j. provide a concluding statement or section that follows from and supports the argument presented; and k. include a call to action.

Standard 2: Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.

2.1 Write informative/explanatory texts that: a. introduce a topic; b. use relevant information from multiple print and multimedia sources; c. organize complex ideas, concepts, and information to make connections and distinctions; d. assess the credibility and accuracy of each source; e. include formatting, graphics, and multimedia to aid comprehension as needed; f. develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic; g. quote or paraphrase the data and conclusions of others while avoiding plagiarism and	2.1 Write informative/explanatory texts that: a. introduce a topic; b. use relevant information from multiple print and multimedia sources; c. organize complex ideas, concepts, and information to make connections and distinctions; d. assess the credibility and accuracy of each source; e. include formatting, graphics, and multimedia to aid comprehension as needed; f. develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic; g. quote or paraphrase the data and conclusions of others while avoiding plagiarism and	2.1 Write informative/explanatory texts that: a. introduce a topic; b. use relevant information from multiple print and multimedia sources c. organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; d. assess the credibility and accuracy of each source; e. include formatting, graphics, and multimedia to aid as needed; f. develop the topic thoroughly by selecting significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic; g. quote or paraphrase the data and conclusions of others	2.1 Write informative/explanatory texts that: a. introduce a topic; b. use relevant information from multiple print and multimedia sources c. organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; d. assess the credibility and accuracy of each source; e. include formatting, graphics, and multimedia to aid as needed; f. develop the topic thoroughly by selecting significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic; g. quote or paraphrase the data and conclusions of others

following a standard format for citation. h. use appropriate and varied transitions to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts; i. use precise language and domain-specific vocabulary to manage the complexity of the topic; j. establish and maintain a consistent style and objective tone while attending to the norms and conventions of the discipline; and k. provide a concluding statement or section that follows from and supports the information or explanation presented.	following a standard format for citation. h. use appropriate and varied transitions to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts; i. use precise language and domain-specific vocabulary to manage the complexity of the topic; j. establish and maintain a consistent style and objective tone while attending norms and conventions of the discipline; and k. provide a concluding statement or section that follows from and supports the information or explanation presented.	while avoiding plagiarism and following a standard format for citation. h. use appropriate and varied transitions and syntax to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts; i. use precise language, domain-specific vocabulary, and techniques such as metaphor, simile, and analogy to manage the complexity of the topic; j. establish and maintain a consistent style and objective tone while attending to the norms and conventions of the discipline; and k. provide a concluding statement or section that follows from and supports the information or explanation presented.	while avoiding plagiarism and following a standard format for citation. h. use appropriate and varied transitions and syntax to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts; i. use precise language, domain-specific vocabulary, and techniques such as metaphor, simile, and analogy to manage the complexity of the topic; j. establish and maintain a consistent style and objective tone while attending to the norms and conventions of the discipline; and k. provide a concluding statement or section that follows from and supports the information or explanation presented.

Standard 3: **Write narratives to develop real or imagined experiences or events using effective techniques, well-chosen details, and well-structured event sequences.**

3.1 Gather ideas from texts, multimedia, and personal experience to write narratives that: a. develop real or imagined experiences or events using effective techniques, well-chosen details, and well-structured event sequences;	3.1 Gather ideas from texts, multimedia, and personal experience to write narratives that: a. develop real or imagined experiences or events using effective techniques, well-chosen details, and well-structured event sequences;	3.1 Gather ideas from texts, multimedia, and personal experience to write narratives that: a. develop real or imagined experiences or events using effective techniques, well-chosen details, and well-structured event sequences;	3.1 Gather ideas from texts, multimedia, and personal experience to write narratives that: a. develop real or imagined experiences or events using effective techniques, well-chosen details, and well-structured event sequences;

b. engage and orient the reader by setting out a problem, situation, or observation, establishing one or multiple point(s) of view, and introducing a narrator and/or characters; create a smooth progression of experiences or events; c. use narrative techniques of dialogue, pacing, description, reflection, and multiple plot lines to develop experiences, events, and/or characters; d. use a variety of techniques to sequence events so that they build on one another to create a coherent whole; e. use precise words and phrases, telling details, and sensory language to convey a vivid picture of the experiences, events, setting, and/or characters; and f. provide a conclusion that follows from and reflects on what is experienced, observed, or resolved over the course of the narrative	b. engage and orient the reader by setting out a problem, situation, or observation, establishing one or multiple point(s) of view, and introducing a narrator and/or characters; create a smooth progression of experiences or events; c. use narrative techniques of dialogue, pacing, description, reflection, and multiple plot lines to develop experiences, events, and/or characters; d. use a variety of techniques to sequence events so that they build on one another to create a coherent whole; e. use precise words and phrases, telling details, and sensory language to convey a vivid picture of the experiences, events, setting, and/or characters; and f. provide a conclusion that follows from and reflects on what is experienced, observed, or resolved over the course of the narrative	b. engage and orient the reader by setting out a problem, situation, or observation and its significance, establishing one or multiple point(s) of view, and introducing a narrator and/or characters; c. create a smooth progression of experiences or events; d. use the narrative techniques of dialogue, pacing, description, reflection, and multiple plot lines, to develop experiences, events, and/or characters; e. use a variety of techniques to sequence events so that they build on one another to create a coherent whole and build toward a particular tone and outcome; f. use precise words and phrases, telling details, and sensory language to convey a vivid picture of the experiences, events, setting, and/or characters; and g. provide a conclusion that follows from and reflects on what is experienced, observed, or resolved over the course of the narrative.	b. engage and orient the reader by setting out a problem, situation, or observation and its significance, establishing one or multiple point(s) of view, and introducing a narrator and/or characters; c. create a smooth progression of experiences or events; d. use the narrative techniques of dialogue, pacing, description, reflection, and multiple plot lines, to develop experiences, events, and/or characters; e. use a variety of techniques to sequence events so that they build on one another to create a coherent whole and build toward a particular tone and outcome; f. use precise words and phrases, telling details, and sensory language to convey a vivid picture of the experiences, events, setting, and/or characters; and g. provide a conclusion that follows from and reflects on what is experienced, observed, or resolved over the course of the narrative.

Language (L)

Standard 4: Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

ENGLISH 1	ENGLISH 2	ENGLISH 3	ENGLISH 4
4.1 When writing: a. use parallel structure; b. identify and use gerunds, infinitives, and participles; c. identify and use active and passive verbs; d. explain and use indicative, imperative, subjunctive, conditional verb moods to communicate different messages; and e. use noun, verb, adjectival, adverbial, participial, prepositional, and absolute phrases and independent, dependent, noun relative, and adverbial clauses to convey specific meanings and add variety and interest to writing.	4.1 When writing: a. use parallel structure; b. use verb, noun, prepositional, and verbal phrases to communicate different meanings; c. Use independent, dependent, noun, relative, and adverbial phrases and clauses to convey shades of meaning and variety; d. Use parallel structures to communicate similar ideas; and e. Use noun, verb, adjectival, adverbial, participial, prepositional, and absolute phrases and independent, dependent, noun relative, and adverbial clauses to convey specific meanings and add variety and interest to writing.	4.1 When writing: a. use verb, noun, prepositional, and verbal phrases to communicate different meanings; b. use independent, dependent, noun, relative, and adverbial phrases and clauses to convey shades of meaning and variety; c. demonstrate command of grammar and usage rules; d. apply the understanding that usage is a matter of convention, can change over time, and is sometimes contested; and e. resolve issues of complex or contested usage, consulting references as needed.	4.1 When writing: a. apply the understanding that usage is a matter of convention, can change over time, and is sometimes contested; and b. resolve issues of complex or contested usage, consulting references as needed.
4.2 Students are expected to build upon and continue applying previous learning. ***Grade 2*** *Form and use frequently occurring irregular plural nouns.*			
4.3 Students are expected to build upon and continue applying previous learning. ***Grade 2*** *Use reflexive pronouns.*			
4.4 Students are expected to build upon and continue applying previous learning. ***Grade 2*** *Form and use the past tense of frequently occurring irregular verbs.*			
4.5 Students are expected to build upon and continue applying previous learning. ***Grade 2*** *Use adjectives and adverbs and choose between them depending on what is to be modified.*			

4.6 Students are expected to build upon and continue applying previous learning. ***Grade 2*** *Use frequently occurring positional and time and place prepositions.*
4.7 Students are expected to build upon and continue applying previous learning. ***Grade 2*** *Use frequently occurring conjunctions.*
4.8 Students are expected to build upon and continue applying previous learning. ***Grade 2*** *Produce, expand, and rearrange complete simple and compound sentences.*

Standard 5: Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

5.1 Students are expected to build upon and continue applying previous learning. ***Grade 5*** *Apply correct usage of capitalization in writing.*			
5.2 Use: a. a semicolon or a conjunctive adverb to link two or more closely related independent clauses; b. a colon to introduce a list or quotation; and c. commas to separate adjacent, parallel structures.	5.2 Use: a. a semicolon or a conjunctive adverb to link two or more closely related independent clauses; b. a colon to introduce a list or quotation; and c. commas to separate adjacent, parallel structures.	5.2 Use: a. semicolon, colon, and comma conventions; and b. hyphenation conventions.	5.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling.
5.3 Students are expected to build upon and continue applying previous learning. ***Grade 3*** *Use conventional spelling for high-frequency words, previously studied words, and for adding suffixes to base words.*			
5.4 Students are expected to build upon and continue applying previous learning. ***Grade 4*** *Use spelling patterns and generalizations.*			
5.5 Students are expected to build upon and continue applying previous learning. ***Grade 3*** *Consult print and multimedia resources to check and correct spellings.*			

Range and Complexity (RC)

Standard 6: Write independently, legibly, and routinely for a variety of tasks, purposes, and audiences over short and extended time frames.

6.1 Write routinely and persevere in writing tasks over short and extended time frames, for a range of domain-specific tasks, and for a variety of purposes and audiences.	6.1 Write routinely and persevere in writing tasks over short and extended time frames, for a range of domain-specific tasks, and for a variety of purposes and audiences.	6.1 Write routinely and persevere in writing tasks over short and extended time frames, for a range of domain-specific tasks, and for a variety of purposes and audiences.	6.1 Write routinely and persevere in writing tasks over short and extended time frames, for a range of domain-specific tasks, and for a variety of purposes and audiences.

6.2 Students are expected to build upon and continue applying previous learning. ***Grade 2*** *Print upper- and lower-case letters proportionally using appropriate handwriting techniques.*			
6.3 Students are expected to build upon and continue applying previous learning. ***Grade 1*** *Write left to right leaving space between words.*			
6.4 Demonstrate effective keyboarding skills.	6.5 Demonstrate effective keyboarding skills.	6.5 Demonstrate effective keyboarding skills.	6.5 Demonstrate effective keyboarding skills.
6.5 Students are expected to build upon and continue applying previous learning. ***Grade 5*** *Connect upper- and lower-case letters efficiently and proportionately in cursive handwriting.*			

Communication (C)

Expectations for Teaching and Learning
Learning should be modeled, supported, and reflect gradual release of responsibility at all levels.
Teachers should continue to address earlier standards as they apply to more complex text.
Students are expected to build upon and continue applying concepts learned previously.

Fundamentals of Communication

- Employ a reciprocal communication process that includes planning, drafting, revising, editing, reviewing, presenting, and reflecting.
- Communicate using style, language, and nonverbal cues appropriate to task, purpose, and audience.
- Use active and attentive communication skills, building on other's ideas to explore, learn, enjoy, argue, and exchange information.
- Monitor delivery and reception throughout the communication process and adjust approach and strategies as needed.
- Adjust speech, using standard English when indicated or appropriate, in a variety of contexts and tasks for presenting or participating in the social exchange of ideas.
- Acquire vocabulary from multiple forms of communication; use newly acquired vocabulary to appropriately communicate in a variety of situations and contexts.

Meaning and Context (MC)

Standard 1: Interact with others to explore ideas and concepts, communicate meaning, and develop logical interpretations through collaborative conversations; build upon the ideas of others to clearly express one's own views while respecting diverse perspectives.

ENGLISH 1	ENGLISH 2	ENGLISH 3	ENGLISH 4
1.1 Gather information from print and multimedia sources to prepare for discussions; draw on evidence that supports the topic, text, or issue being discussed; and develop logical interpretations of new findings.	1.1 Gather information from print and multimedia sources to prepare for discussions; draw on evidence that supports the topic, text, or issue being discussed; and develop logical interpretations of new findings.	1.1 Gather information from print and multimedia sources to prepare for discussions; draw on evidence that supports the topic, text, or issue being discussed; develop logical interpretations of new findings; and restate new interpretations.	1.1 Gather information from print and multimedia sources to prepare for discussions; draw on evidence that supports the topic, text, or issue being discussed; develop logical interpretations of new findings; and restate new interpretations.
1.2 Initiate and participate effectively in a range of	1.2 Initiate and participate effectively in a range of	1.2 Initiate and participate effectively in a range of	1.2 Initiate and participate effectively in a range of

collaborative discussions with diverse partners; build on the ideas of others and express own ideas clearly and persuasively.	collaborative discussions with diverse partners; build on the ideas of others and express own ideas clearly and persuasively.	collaborative discussions with diverse partners; build on the ideas of others and express own ideas clearly and persuasively.	collaborative discussions with diverse partners; build on the ideas of others and express own ideas clearly and persuasively.
1.3 Develop, apply, and adjust reciprocal communication skills and techniques with other students and adults.	1.3 Develop, apply, and adjust reciprocal communication skills and techniques with other students and adults.	1.3 Develop, apply, and adjust reciprocal communication skills and techniques with other students and adults.	1.3 Develop, apply, and adjust reciprocal communication skills and techniques with other students and adults.
1.4 Engage in dialogue with peers and adults to explore meaning and interaction of ideas, concepts, and elements of text, reflecting, constructing, and articulating new understandings.	1.4 Engage in dialogue with peers and adults to explore meaning and interaction of ideas, concepts, and elements of text, reflecting, constructing, and articulating new understandings.	1.4 Engage in dialogue with peers and adults to explore meaning and interaction of ideas, concepts, and elements of text, reflecting, constructing, and articulating new understandings.	1.4 Engage in dialogue with peers and adults to explore meaning and interaction of ideas, concepts, and elements of text, reflecting, constructing, and articulating new understandings.
1.5 Synthesize areas of agreement and disagreement including justification for personal perspective; revise conclusions based on new evidence.	1.5 Synthesize areas of agreement and disagreement including justification for personal perspective; revise conclusions based on new evidence.	1.5 Synthesize areas of agreement and disagreement including justification for personal perspective; revise conclusions based on new evidence.	1.5 Synthesize areas of agreement and disagreement including justification for personal perspective; revise conclusions based on new evidence.
1.6 Utilize various modes of communication to present a clear, unique interpretation of diverse perspectives.	1.6 Utilize various modes of communication to present a clear, unique interpretation of diverse perspectives.	1.6 Utilize various modes of communication to present a clear, unique interpretation of diverse perspectives using facts and details.	1.6 Utilize various modes of communication to present a clear, unique interpretation of diverse perspectives using facts and details.

Standard 2: Articulate ideas, claims, and perspectives in a logical sequence using information, findings, and credible evidence from sources.

2.1 Present information and findings from multiple authoritative sources; assess the usefulness of each source in answering the research question, citing supporting evidence clearly, concisely,	2.1 Present information and findings from multiple authoritative sources; assess the usefulness of each source in answering the research question, citing supporting evidence clearly, concisely,	2.1 Present information and findings from multiple authoritative sources; assess the strengths and limitations of each source, citing supporting evidence clearly, concisely, and logically such	2.1 Present information and findings from multiple authoritative sources; assess the strengths and limitations of each source, citing supporting evidence clearly, concisely, and logically such

and logically such that listeners can follow the line of reasoning, and the organization, development, substance, and style are appropriate to purpose, audience, and task.	and logically such that listeners can follow the line of reasoning, and the organization, development, substance, and style are appropriate to purpose, audience, and task.	that listeners can follow the line of reasoning, and the organization, development, substance, and style are appropriate to purpose, audience, and task.	that listeners can follow the line of reasoning, and the organization, development, substance, and style are appropriate to purpose, audience, and task.
2.2 Distinguish between credible and non-credible sources of information.	2.2 Distinguish between credible and non-credible sources of information.	2.2 Distinguish between credible and non-credible sources of information.	2.2 Distinguish between credible and non-credible sources of information.
2.3 Quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.	2.3 Quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.	2.3 Quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.	2.3 Quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.
2.4 Adapt speech to a variety of contexts and tasks, using standard English when indicated or appropriate.	2.4 Adapt speech to a variety of contexts and tasks, using standard English when indicated or appropriate.	2.4 Adapt speech to a variety of contexts and tasks, using standard English when indicated or appropriate.	2.4 Adapt speech to a variety of contexts and tasks, using standard English when indicated or appropriate.

Standard 3: Communicate information through strategic use of multiple modalities and multimedia to enrich understanding when presenting ideas and information.

3.1 Determine how context influences the mode of communication used by the presenter in a given situation.	3.1 Analyze how context influences the mode of communication used by the presenter in a given situation.	3.1 Analyze how context influences choice of communication, and employ the appropriate mode for presenting ideas in a given situation.	3.1 Analyze how context influences choice of communication, and employ the appropriate mode for presenting ideas in a given situation.
3.2 Create engaging visual and/or multimedia presentations, using a variety of media forms to enhance understanding of findings, reasoning, and evidence for diverse audiences.	3.2 Create visual and/or multimedia presentations using a variety of media forms to enhance understanding of findings, reasoning, and evidence for diverse audiences.	3.2 Construct engaging visual and/or multimedia presentations using a variety of media forms to enhance understanding of findings, reasoning, and evidence for diverse audiences.	3.2 Construct engaging visual and/or multimedia presentations using a variety of media forms to enhance understanding of findings, reasoning, and evidence for diverse audiences.

Language, Craft, and Structure (LCS)

Standard 4: Critique how a speaker addresses content and uses craft techniques that stylistically and structurally inform, engage, and impact audience and convey messages.

ENGLISH 1	ENGLISH 2	ENGLISH 3	ENGLISH 4
4.1 Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric, identifying any fallacies in reasoning or exaggerated or distorted evidence.	4.1 Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric, identifying any fallacies in reasoning or exaggerated or distorted evidence.	4.1 Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric, assessing the stance, premises, links among ideas, word choice, points of emphasis, and tone used.	4.1 Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric, assessing the stance, premises, links among ideas, word choice, points of emphasis, and tone used.
4.2 Determine if the speaker develops well-organized messages that use logical, emotional, and ethical appeals.	4.2 Determine if the speaker develops well-organized messages that use logical, emotional, and ethical appeals.	4.2 Analyze the speaker's delivery of messages that present an apparent and logical perspective on the subject and support the central idea with well-chosen and well-organized facts and details.	4.2 Evaluate the speaker's delivery of messages that present an apparent and logical perspective on the subject and support the central idea with well-chosen and well-organized facts and details.
4.3 Analyze the speaker's use of repetition, rhetorical questions, and delivery style to convey the message and impact the audience.	4.3 Analyze the speaker's use of repetition, rhetorical questions, and delivery style to convey the message and impact the audience.	4.3 Evaluate the effectiveness of the speaker's use of repetition, rhetorical questions, and delivery style to convey the message and impact the audience.	4.3 Evaluate the effectiveness of the speaker's use of repetition, rhetorical questions, and delivery style to convey the message and impact the audience.

Standard 5: Incorporate craft techniques to engage and impact audience and convey messages.

5.1 Remain conscious of the audience and anticipate possible misconceptions or objections.	5.1 Remain conscious of the audience and anticipate possible misconceptions or objections.	5.1 Give extemporaneous and planned presentations that are engaging and well-crafted.	5.1 Give extemporaneous and planned presentations that are engaging and well-crafted.
5.2 Employ effective repetition, rhetorical questions, and delivery style to convey message to impact the audience.	5.2 Employ effective repetition, rhetorical questions, and delivery style to convey message to impact the audience.	5.2 Deliver messages that present an apparent and logical perspective on the subject and support the central idea with well-	5.2 Deliver messages that present an apparent and logical perspective on the subject and support the central idea with well-chosen

		chosen and well-organized facts and details.	and well-organized facts and details.
5.3 Develop messages that use logical, emotional, and ethical appeals.	5.3 Develop messages that use logical, emotional, and ethical appeals.	5.3 Develop messages that use logical, emotional, and ethical appeals.	5.3 Develop messages that use logical, emotional, and ethical appeals.

Disciplinary Literacy (DL)

Reading, writing, communicating, thinking critically, and performing in meaningful, relevant ways within and across disciplines are essential practices for accessing and deeply understanding content. Immersion in the language and thinking processes valued by each discipline guides students to develop and cultivate a deeper understanding of particular disciplines.

College- and career-ready students must be able to expertly navigate curriculum, paying close attention to practices unique to a particular discipline. Disciplinary Literacy works in concert with Inquiry-Based Literacy Standards to prepare students for the demands of the 21st century. These practices also offer opportunities for students to demonstrate their understanding of the content in traditional and non-traditional ways.

The *South Carolina College- and Career-Ready Standards for English Language Arts 2015* include the Disciplinary Literacy practices listed below:

- **Read, write, and communicate using knowledge of a particular discipline.**
- **Integrate the Reading, Writing, and Communication Standards and the Inquiry-Based Literacy Standards to communicate and create understanding within content areas.**
- **Extend and deepen understanding of content through purposeful, authentic, real-world tasks to show understanding and integration of content within and across disciplines.**

SOUTH CAROLINA
STATE DEPARTMENT OF EDUCATION

Updated Proposed Addendum to the First Reading State Board of Education Approved
South Carolina College- and Career-Ready Standards for Mathematics

The items in the categories listed below were noted in the High School section of the document following First Reading Approval by the State Board of Education on February 11, 2015:

Typographical or Scrivener's Errors

Intentions of the standards are not altered.

- Category Title: Pages 71 & 111 – "Interferences" should be "Inferences"
- Category Title: Pages 79, 86, & 94 – "Function" should be "Functions"
- Category Title: Page 121 – "Statistics and Probability – Interpreting Data" should be "Vector and Matrix Quantities"
- GGPE.7*: Pages 67 & 106 – "distance formula" should be "distance and midpoint formulas"; "place" should be "plane"
- GSRT.4b*: Pages 68 & 106 – "if" should be added to the beginning of the sentence
- SPID.1*: Page 76, 107, & 112 – "all" should be "only"
- FLQE.4*: Pages 64 and 119 – Remove *; should be "FLQE.4"

South Carolina College- and Career-Ready Standards for Mathematics

South Carolina Department of Education Columbia, South Carolina

2015

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State Board of Education Approved – First Reading on February 11, 2015

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Acknowledgments

South Carolina owes a debt of gratitude to the following individuals and groups for their assistance in the development of new, high-quality, South Carolina College- and Career-Ready Standards for Mathematics.

- *South Carolina College- and Career-Ready Standards for Mathematics* was collaboratively written by a team of South Carolina classroom teachers, instructional coaches, district leaders, higher education faculty, and educators who specialize in English Language Learners, special education, career and technology education, and assessment.
- *South Carolina College- and Career-Ready Standards for Mathematics* was developed under and supported by the leadership of numerous South Carolina Department of Education staff and offices from across the agency.
- *South Carolina College- and Career-Ready Standards for Mathematics* was reviewed by the public, the Education Oversight Committee's review panel that included educators, parents, business and community members, and higher education faculty, and a task force appointed by the South Carolina Department of Education that included educators, parents, business and community members, and higher education faculty. All feedback given by these individuals and groups was considered during the revisions phase of the development process.

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Explanation of Purpose and Process

Purpose

South Carolina College- and Career-Ready Standards for Mathematics was written in response to Act 200, ratified on June 6, 2014, which required the South Carolina Department of Education to facilitate the process of developing new, high-quality, college- and career-ready standards for English Language Arts and mathematics. The mathematics standards development process was designed to develop clear, rigorous, and coherent standards for mathematics that will prepare students for success in their intended career paths that will either lead directly to the workforce or further education in post-secondary institutions.

Process

South Carolina College- and Career-Ready Standards for Mathematics was collaboratively written by a team of South Carolina classroom teachers, instructional coaches, district leaders, higher education faculty, and educators who specialize in English Language Learners, special education, career and technology education, and assessment who were selected through an application and rubric process by the South Carolina Department of Education. The South Carolina Department of Education's mathematics writing team began the development process by reviewing a number of resources and conceptualizing what students who graduate from South Carolina's public education system should demonstrate. The resultant *South Carolina Portrait of a College- and Career-Ready Mathematics Student* is located on page 10 and parallels the characteristics of the *Profile of the South Carolina Graduate*, which is located on page 9 and detailed on page 5. Both of these documents served as the foundation and compass that guided the mathematics writing team's determination of the components of *South Carolina College- and Career-Ready Standards for Mathematics.*

The draft of *South Carolina College- and Career-Ready Standards for Mathematics* was posted online via the South Carolina Department of Education's website for public review on November 5, 2014. The public was invited to provide feedback via an online survey until November 30, 2014. Over 1,600 public review surveys were submitted with feedback regarding the draft standards. Simultaneously, the South Carolina Department of Education convened a task force of educators, parents, business and community leaders, and higher education faculty that provided written feedback of the draft standards. The South Carolina Education Oversight Committee also convened a review panel of educators, parents, business and community members, and higher education faculty to review the draft standards. The South Carolina Education Oversight Committee's review panel submitted a report that included recommendations for revisions to the draft standards to the South Carolina Department of Education.

The standards development process continued as the comments from the online public review survey, the South Carolina Department of Education's task force, and the South Carolina Education Oversight Committee's review panel were compiled, reviewed, and implemented by the mathematics writing team to make revisions to the draft standards. Multiple joint meetings with representatives from the South Carolina Department of Education's mathematics writing team, the South Carolina Education Oversight Committee's review panel, higher education, the business community, and the State Board of Education were held to further discuss the implementation of all feedback. Additional revisions were made to the draft document as a result of these meetings.

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South Carolina College- and Career-Ready Standards for Mathematics
K – 12 Overview

South Carolina College- and Career-Ready Standards for Mathematics contains South Carolina College- and Career-Ready (SCCCR) Content Standards for Mathematics that represent a balance of conceptual and procedural knowledge and specify the mathematics that students will master in each grade level and high school course. *South Carolina College- and Career-Ready Standards for Mathematics* also contains SCCCR Graduation Standards, a subset of the SCCCR Content Standards for Mathematics that specify the mathematics high school students should know and be able to do in order to be both college- and career-ready. The SCCCR Graduation Standards are supported and extended by the SCCCR Content Standards for Mathematics. The course sequences students follow in high school should be aligned with their intended career paths that will either lead directly to the workforce or further education in post-secondary institutions. Selected course sequences will provide students with the opportunity to learn all SCCCR Graduation Standards as appropriate for their intended career paths. Additionally, *South Carolina College- and Career-Ready Standards for Mathematics* contains SCCCR Mathematical Process Standards, which describe the ways in which students will individually and collaboratively engage with the mathematics in the content standards. Therefore, instruction in each grade level and course must be based on both the SCCCR Content Standards for Mathematics and the SCCCR Mathematical Process Standards.

The content standards and the process standards work together to enable all students to develop the world class knowledge, skills, and life and career characteristics identified in the *Profile of the South Carolina Graduate*. In *South Carolina College- and Career-Ready Standards for Mathematics*, the needed world class mathematical

- knowledge is supported by the rigorous K – 12 grade level and course content standards,
- skills are identified in the SCCCR Mathematical Process Standards, and
- life and career characteristics are identified in the *South Carolina Portrait of a College- and Career-Ready Mathematics Student*.

In order to ensure students are college- and career-ready, all curricular decisions made by districts, schools, and teachers should be based on the needs of students, the SCCCR Content Standards for Mathematics, and the SCCCR Mathematical Process Standards. Since manipulatives and technology are integral to the development of mathematical understanding in all grade levels and courses, curriculum should support, and instructional approaches should include, the use of a variety of concrete materials and technological tools in order to help students explore connections, make conjectures, formulate generalizations, draw conclusions, and discover new mathematical ideas

Format

Each grade level and course is divided into Key Concepts that organize the content into broad categories of related standards. Neither the order of Key Concepts nor the order of individual standards within a Key Concept is intended to prescribe an instructional sequence. Each Key Concept contains standards that define what students will understand and be able to do. Some standards are supported by lettered standards. For a comprehensive understanding, educators should always refer to the overarching standards as they are relative to the lettered standards. Standards are coded using the methods below.

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In grades K – 8:

- GradeLevel.KeyConcept.StandardNumber (e.g., K.NS.1) or, if applicable,
- GradeLevel.KeyConcept.StandardNumberStandardLetter (e.g., K.NS.4a)

In courses:

- CourseName.KeyConcept.StandardNumber (e.g., A1.AREI.1) or, if applicable,
- CourseName.KeyConcept.StandardNumberStandardLetter (e.g., A1.AREI.6a)

As used in the SCCCR Content Standards for Mathematics and the SCCCR Mathematical Process Standards, the following terms are defined to mean:

- *Including* references content that must be mastered, while *e.g.* references possible illustrative examples. The phrase *i.e.* references the only examples or terms that should be used.
- *Fluently* and *fluency* describe a student's ability to compute with accuracy, flexibility, and efficiency (Kilpatrick, Swafford, & Findell, 2001).
- *Real-world* refers to authentic contexts through which students engage in mathematics and should serve as a stepping-stone for thinking about important mathematical concepts.

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South Carolina College- and Career-Ready
Mathematical Process Standards

The South Carolina College- and Career-Ready (SCCCR) Mathematical Process Standards demonstrate the ways in which students develop conceptual understanding of mathematical content and apply mathematical skills. As a result, the SCCCR Mathematical Process Standards should be integrated within the SCCCR Standards for Mathematics for each grade level and course. Since the process standards drive the pedagogical component of teaching and serve as the means by which students should demonstrate understanding of the content standards, the process standards must be incorporated as an integral part of overall student expectations when assessing content understanding.

Students who are college- and career-ready take a productive and confident approach to mathematics. They are able to recognize that mathematics is achievable, sensible, useful, doable, and worthwhile. They also perceive themselves as effective learners and practitioners of mathematics and understand that a consistent effort in learning mathematics is beneficial.

The Program for International Student Assessment defines mathematical literacy as "an individual's capacity to formulate, employ, and interpret mathematics in a variety of contexts. It includes reasoning mathematically and using mathematical concepts, procedures, facts, and tools to describe, explain, and predict phenomena. It assists individuals to recognize the role that mathematics plays in the world and to make the well-founded judgments and decisions needed by constructive, engaged and reflective citizens" (Organization for Economic Cooperation and Development, 2012).

A mathematically literate student can:

1. **Make sense of problems and persevere in solving them.**
    a. Relate a problem to prior knowledge.
    b. Recognize there may be multiple entry points to a problem and more than one path to a solution.
    c. Analyze what is given, what is not given, what is being asked, and what strategies are needed, and make an initial attempt to solve a problem.
    d. Evaluate the success of an approach to solve a problem and refine it if necessary.

2. **Reason both contextually and abstractly.**
    a. Make sense of quantities and their relationships in mathematical and real-world situations.
    b. Describe a given situation using multiple mathematical representations.
    c. Translate among multiple mathematical representations and compare the meanings each representation conveys about the situation.
    d. Connect the meaning of mathematical operations to the context of a given situation.

3. **Use critical thinking skills to justify mathematical reasoning and critique the reasoning of others.**
    a. Construct and justify a solution to a problem.
    b. Compare and discuss the validity of various reasoning strategies.
    c. Make conjectures and explore their validity.
    d. Reflect on and provide thoughtful responses to the reasoning of others.

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4. **Connect mathematical ideas and real-world situations through modeling.**
    a. Identify relevant quantities and develop a model to describe their relationships.
    b. Interpret mathematical models in the context of the situation.
    c. Make assumptions and estimates to simplify complicated situations.
    d. Evaluate the reasonableness of a model and refine if necessary.

5. **Use a variety of mathematical tools effectively and strategically.**
    a. Select and use appropriate tools when solving a mathematical problem.
    b. Use technological tools and other external mathematical resources to explore and deepen understanding of concepts.

6. **Communicate mathematically and approach mathematical situations with precision.**
    a. Express numerical answers with the degree of precision appropriate for the context of a situation.
    b. Represent numbers in an appropriate form according to the context of the situation.
    c. Use appropriate and precise mathematical language.
    d. Use appropriate units, scales, and labels.

7. **Identify and utilize structure and patterns.**
    a. Recognize complex mathematical objects as being composed of more than one simple object.
    b. Recognize mathematical repetition in order to make generalizations.
    c. Look for structures to interpret meaning and develop solution strategies.

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Profile of the South Carolina Graduate

World Class Knowledge

- Rigorous standards in language arts and math for career and college readiness
- Multiple languages, science, technology, engineering, mathematics (STEM), arts and social sciences

World Class Skills

- Creativity and innovation
- Critical thinking and problem solving
- Collaboration and teamwork
- Communication, information, media and technology
- Knowing how to learn

Life and Career Characteristics

- Integrity
- Self-direction
- Global perspective
- Perseverance
- Work ethic
- Interpersonal skills

Approved by SCASA Superintendent's Roundtable and SC Chamber of Commerce.

transformSC tomorrow won't wait for our students

AN INITIATIVE OF SOUTH CAROLINA COUNCIL ON COMPETITIVENESS

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South Carolina Portrait of a College- and Career-Ready Mathematics Student

A South Carolina student who is college- and career-ready in mathematics will demonstrate:

- **Academic Success and Employability:** Student demonstrates strong conceptual knowledge and strategically applies appropriate academic and technical skills and tools to model and solve problems.

- **Interdependent Thinking and Collaborative Spirit:** Student collaborates effectively with others and respectfully critiques varied perspectives.

- **Intellectual Integrity and Curiosity:** Student researches by appropriately collecting, assimilating, and synthesizing data and information, cites relevant sources, and verifies with evidence. Student investigates mathematical situations in order to develop and test conjectures.

- **Logical Reasoning:** Student analyzes and evaluates evidence in a comprehensive and discerning manner and forms conclusions based on evidence using logic and reason.

- **Self-Reliance and Autonomy:** Student demonstrates qualities of an innovative, creative and independent learner and contributor to society, including goal setting, self-monitoring and regulation, constructive interactions with others, time management, and tenacity.

- **Effective Communication:** Student communicates appropriately, fluently, and with precision in a variety of written and oral modes, including appropriate technologies, based on audience, task, purpose, and discipline.

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South Carolina College- and Career-Ready Standards for Mathematics
Overview for Grades K – 5

The South Carolina College- and Career-Ready (SCCCR) Content Standards for Mathematics for grades K – 5 are divided into Key Concepts that organize the content into broad categories of related standards. Neither the order of Key Concepts nor the order of individual standards within a Key Concept is intended to prescribe an instructional sequence. The standards should serve as the basis for development of curriculum, instruction, and assessment.

Innovative Key Concepts in the SCCCR Content Standards for Mathematics for grades K – 5 that have been included with the other commonly known strands or Key Concepts of mathematics are *Number Sense* and *Number Sense and Base Ten*. Research shows that while some students intuitively acquire certain counting principles and number relationships and are thus successful in mathematics, others struggle. To emphasize the importance of number development, and to ensure that all students develop the sense of numeracy that is necessary for mastery of basic facts and the later application to operations, the Key Concept of *Number Sense* is included as a foundational part of the SCCCR Content Standards for Mathematics. Once students have developed a sense of numeracy, the standards in the Key Concept of *Number Sense and Base Ten* are designed to expand student understanding to comparative size and place value relationships.

The tables below show the progression of the broad Key Concepts across the primary grades K – 2 and the upper elementary grades 3 – 5. The progression can also be traced across those two groupings for a K – 5 view.

Key Concepts by Grade Band

Kindergarten	Grade 1	Grade 2
Number Sense		
Number Sense and Base Ten	Number Sense and Base Ten	Number Sense and Base Ten
Algebraic Thinking and Operations	Algebraic Thinking and Operations	Algebraic Thinking and Operations
Geometry	Geometry	Geometry
Measurement and Data Analysis	Measurement and Data Analysis	Measurement and Data Analysis

Grade 3	Grade 4	Grade 5
Number Sense and Base Ten	Number Sense and Base Ten	Number Sense and Base Ten
Number Sense – Fractions	Number Sense and Operations – Fractions	Number Sense and Operations – Fractions
Algebraic Thinking and Operations	Algebraic Thinking and Operations	Algebraic Thinking and Operations
Geometry	Geometry	Geometry
Measurement and Data Analysis	Measurement and Data Analysis	Measurement and Data Analysis

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Kindergarten

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A mathematically literate student can:

1. **Make sense of problems and persevere in solving them.**
    a. Relate a problem to prior knowledge.
    b. Recognize there may be multiple entry points to a problem and more than one path to a solution.
    c. Analyze what is given, what is not given, what is being asked, and what strategies are needed, and make an initial attempt to solve a problem.
    d. Evaluate the success of an approach to solve a problem and refine it if necessary.

2. **Reason both contextually and abstractly.**
    a. Make sense of quantities and their relationships in mathematical and real-world situations.
    b. Describe a given situation using multiple mathematical representations.
    c. Translate among multiple mathematical representations and compare the meanings each representation conveys about the situation.
    d. Connect the meaning of mathematical operations to the context of a given situation.

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3. **Use critical thinking skills to justify mathematical reasoning and critique the reasoning of others.**
    a. Construct and justify a solution to a problem.
    b. Compare and discuss the validity of various reasoning strategies.
    c. Make conjectures and explore their validity.
    d. Reflect on and provide thoughtful responses to the reasoning of others.

4. **Connect mathematical ideas and real-world situations through modeling.**
    a. Identify relevant quantities and develop a model to describe their relationships.
    b. Interpret mathematical models in the context of the situation.
    c. Make assumptions and estimates to simplify complicated situations.
    d. Evaluate the reasonableness of a model and refine if necessary.

5. **Use a variety of mathematical tools effectively and strategically.**
    a. Select and use appropriate tools when solving a mathematical problem.
    b. Use technological tools and other external mathematical resources to explore and deepen understanding of concepts.

6. **Communicate mathematically and approach mathematical situations with precision.**
    a. Express numerical answers with the degree of precision appropriate for the context of a situation.
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    c. Use appropriate and precise mathematical language.
    d. Use appropriate units, scales, and labels.

7. **Identify and utilize structure and patterns.**
    a. Recognize complex mathematical objects as being composed of more than one simple object.
    b. Recognize mathematical repetition in order to make generalizations.
    c. Look for structures to interpret meaning and develop solution strategies.

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Kindergarten

Key Concepts	Standards	
Number Sense	**The student will:**	
	K.NS.1	Count forward by ones and tens to 100.
	K.NS.2	Count forward by ones beginning from any number less than 100.
	K.NS.3	Read numbers from 0 – 20 and represent a number of objects 0 – 20 with a written numeral.
	K.NS.4	Understand the relationship between number and quantity. Connect counting to cardinality by demonstrating an understanding that: a. the last number said tells the number of objects in the set (cardinality); b. the number of objects is the same regardless of their arrangement or the order in which they are counted (conservation of number); c. each successive number name refers to a quantity that is one more and each previous number name refers to a quantity that is one less.
	K.NS.5	Count a given number of objects from 1 – 20 and connect this sequence in a one-to-one manner.
	K.NS.6	Recognize a quantity of up to ten objects in an organized arrangement (subitizing).
	K.NS.7	Determine whether the number of up to ten objects in one group is more than, less than, or equal to the number of up to ten objects in another group using matching and counting strategies.
	K.NS.8	Compare two written numerals up to 10 using *more than*, *less than* or *equal to*.
	K.NS.9	Identify first through fifth and last positions in a line of objects.
Number Sense and Base Ten	**The student will:**	
	K.NSBT.1	Compose and decompose numbers from 11 – 19 separating ten ones from the remaining ones using objects and drawings.
Algebraic Thinking and Operations	**The student will:**	
	K.ATO.1	Model situations that involve addition and subtraction within 10 using objects, fingers, mental images, drawings, acting out situations, verbal explanations, expressions, and equations.
	K.ATO.2	Solve real-world/story problems using objects and drawings to find sums up to 10 and differences within 10.
	K.ATO.3	Compose and decompose numbers up to 10 using objects, drawings, and equations.
	K.ATO.4	Create a sum of 10 using objects and drawings when given one of two addends 1 – 9.
	K.ATO.5	Add and subtract fluently within 5.
	K.ATO.6	Describe simple repeating patterns using AB, AAB, ABB, and ABC type patterns.

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Geometry	**The student will:**	
	K.G.1	Describe positions of objects by appropriately using terms, including *below, above, beside, between, inside, outside, in front of,* or *behind*.
	K.G.2	Identify and describe a given shape and shapes of objects in everyday situations to include two-dimensional shapes (i.e., triangle, square, rectangle, hexagon, and circle) and three-dimensional shapes (i.e., cone, cube, cylinder, and sphere).
	K.G.3	Classify shapes as two-dimensional/flat or three-dimensional/solid and explain the reasoning used.
	K.G.4	Analyze and compare two- and three-dimensional shapes of different sizes and orientations using informal language.
	K.G.5	Draw two-dimensional shapes (i.e., square, rectangle, triangle, hexagon, and circle) and create models of three-dimensional shapes (i.e., cone, cube, cylinder, and sphere).
Measurement and Data Analysis	**The student will:**	
	K.MDA.1	Identify measureable attributes (length, weight) of an object.
	K.MDA.2	Compare objects using words such as *shorter/longer*, *shorter/taller*, and *lighter/heavier*.
	K.MDA.3	Sort and classify data into 2 or 3 categories with data not to exceed 20 items in each category.
	K.MDA.4	Represent data using object and picture graphs and draw conclusions from the graphs.

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Grade 1

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    c. Translate among multiple mathematical representations and compare the meanings each representation conveys about the situation.
    d. Connect the meaning of mathematical operations to the context of a given situation.

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3. **Use critical thinking skills to justify mathematical reasoning and critique the reasoning of others.**
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7. **Identify and utilize structure and patterns.**
    a. Recognize complex mathematical objects as being composed of more than one simple object.
    b. Recognize mathematical repetition in order to make generalizations.
    c. Look for structures to interpret meaning and develop solution strategies.

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Grade 1

Key Concepts	Standards	
Number Sense and Base Ten	**The student will:**	
	1.NSBT.1	Extend the number sequence to: a. count forward by ones to 120 starting at any number; b. count by fives and tens to 100, starting at any number; c. read, write and represent numbers to 100 using concrete models, standard form, and equations in expanded form; d. read and write in word form numbers zero through nineteen, and multiples of ten through ninety.
	1.NSBT.2	Understand place value through 99 by demonstrating that: a. ten ones can be thought of as a bundle (group) called a "ten"; b. the tens digit in a two-digit number represents the number of tens and the ones digit represents the number of ones; c. two-digit numbers can be decomposed in a variety of ways (e.g., 52 can be decomposed as 5 tens and 2 ones or 4 tens and 12 ones, etc.) and record the decomposition as an equation.
	1.NSBT.3	Compare two two-digit numbers based on the meanings of the tens and ones digits, using the words *greater than*, *equal to*, or *less than.*
	1.NSBT.4	Add through 99 using concrete models, drawings, and strategies based on place value to: a. add a two-digit number and a one-digit number, understanding that sometimes it is necessary to compose a ten (regroup); b. add a two-digit number and a multiple of 10.
	1.NSBT.5	Determine the number that is 10 more or 10 less than a given number through 99 and explain the reasoning verbally and with multiple representations, including concrete models.
	1.NSBT.6	Subtract a multiple of 10 from a larger multiple of 10, both in the range 10 to 90, using concrete models, drawings, and strategies based on place value.
Algebraic Thinking and Operations	**The student will:**	
	1.ATO.1	Solve real-world/story problems using addition (as a joining action and as a part-part-whole action) and subtraction (as a separation action, finding parts of the whole, and as a comparison) through 20 with unknowns in all positions.
	1.ATO.2	Solve real-world/story problems that include three whole number addends whose sum is less than or equal to 20.
	1.ATO.3	Apply Commutative and Associative Properties of Addition to find the sum (through 20) of two or three addends.
	1.ATO.4	Understand subtraction as an unknown addend problem.
	1.ATO.5	Recognize how counting relates to addition and subtraction.
	1.ATO.6	Demonstrate: a. addition and subtraction through 20; b. fluency with addition and related subtraction facts through 10.

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	1.ATO.7	Understand the meaning of the equal sign as a relationship between two quantities (sameness) and determine if equations involving addition and subtraction are true.
	1.ATO.8	Determine the missing number in addition and subtraction equations within 20.
	1.ATO.9	Create, extend and explain using pictures and words for: a. repeating patterns (e.g., AB, AAB, ABB, and ABC type patterns); b. growing patterns (between 2 and 4 terms/figures).
Geometry	**The student will:**	
	1.G.1	Distinguish between a two-dimensional shape's defining (e.g., number of sides) and non-defining attributes (e.g., color).
	1.G.2	Combine two-dimensional shapes (i.e., square, rectangle, triangle, hexagon, rhombus, and trapezoid) or three-dimensional shapes (i.e., cube, rectangular prism, cone, and cylinder) in more than one way to form a composite shape.
	1.G.3	Partition two-dimensional shapes (i.e., square, rectangle, circle) into two or four equal parts.
	1.G.4	Identify and name two-dimensional shapes (i.e., square, rectangle, triangle, hexagon, rhombus, trapezoid, and circle).
Measurement and Data Analysis	**The student will:**	
	1.MDA.1	Order three objects by length using indirect comparison.
	1.MDA.2	Use nonstandard physical models to show the length of an object as the number of same size units of length with no gaps or overlaps.
	1.MDA.3	Use analog and digital clocks to tell and record time to the hour and half hour.
	1.MDA.4	Collect, organize, and represent data with up to 3 categories using object graphs, picture graphs, t-charts and tallies.
	1.MDA.5	Draw conclusions from given object graphs, picture graphs, t-charts, tallies, and bar graphs.
	1.MDA.6	Identify a penny, nickel, dime and quarter and write the coin values using a ¢ symbol.

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Grade 2

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    d. Connect the meaning of mathematical operations to the context of a given situation.

DRAFT - DO NOT DUPLICATE

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DRAFT - DO NOT DUPLICATE

Grade 2

Key Concepts	Standards	
Number Sense and Base Ten	**The student will:**	
	2.NSBT.1	Understand place value through 999 by demonstrating that: a. 100 can be thought of as a bundle (group) of 10 tens called a "hundred"; b. the hundreds digit in a three-digit number represents the number of hundreds, the tens digit represents the number of tens, and the ones digit represents the number of ones; c. three-digit numbers can be decomposed in multiple ways (e.g., 524 can be decomposed as 5 hundreds, 2 tens and 4 ones or 4 hundreds, 12 tens, and 4 ones, etc.).
	2.NSBT.2	Count by tens and hundreds to 1,000 starting with any number.
	2.NSBT.3	Read, write and represent numbers through 999 using concrete models, standard form, and equations in expanded form.
	2.NSBT.4	Compare two numbers with up to three digits using words and symbols (i.e., >, =, or <).
	2.NSBT.5	Add and subtract fluently through 99 using knowledge of place value and properties of operations.
	2.NSBT.6	Add up to four two-digit numbers using strategies based on knowledge of place value and properties of operations.
	2.NSBT.7	Add and subtract through 999 using concrete models, drawings, and symbols which convey strategies connected to place value understanding.
	2.NSBT.8	Determine the number that is 10 or 100 more or less than a given number through 1,000 and explain the reasoning verbally and in writing.
Algebraic Thinking and Operations	**The student will:**	
	2.ATO.1	Solve one- and two-step real-world/story problems using addition (as a joining action and as a part-part-whole action) and subtraction (as a separation action, finding parts of the whole, and as a comparison) through 99 with unknowns in all positions.
	2.ATO.2	Demonstrate fluency with addition and related subtraction facts through 20.
	2.ATO.3	Determine whether a number through 20 is odd or even using pairings of objects, counting by twos, or finding two equal addends to represent the number (e.g., 3 + 3 = 6).
	2.ATO.4	Use repeated addition to find the total number of objects arranged in a rectangular array with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.

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Geometry	**The student will:**	
	2.G.1	Identify triangles, quadrilaterals, hexagons, and cubes. Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces.
	2.G.2	Partition a rectangle into rows and columns of same-size squares to form an array and count to find the total number of parts.
	2.G.3	Partition squares, rectangles and circles into two or four equal parts, and describe the parts using the words *halves*, *fourths*, *a half of*, and *a fourth of*. Understand that when partitioning a square, rectangle or circle into two or four equal parts, the parts become smaller as the number of parts increases.
Measurement and Data Analysis	**The student will:**	
	2.MDA.1	Select and use appropriate tools (e.g., rulers, yardsticks, meter sticks, measuring tapes) to measure the length of an object.
	2.MDA.2	Measure the same object or distance using a standard unit of one length and then a standard unit of a different length and explain verbally and in writing how and why the measurements differ.
	2.MDA.3	Estimate and measure length/distance in customary units (i.e., inch, foot, yard) and metric units (i.e., centimeter, meter).
	2.MDA.4	Measure to determine how much longer one object is than another, using standard length units.
	2.MDA.5	Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, …, and represent whole-number sums and differences through 99 on a number line diagram.
	2.MDA.6	Use analog and digital clocks to tell and record time to the nearest five-minute interval using *a.m.* and *p.m.*
	2.MDA.7	Solve real-world/story problems involving dollar bills using the $ symbol or involving quarters, dimes, nickels, and pennies using the ¢ symbol.
	2.MDA.8	Generate data by measuring objects in whole unit lengths and organize the data in a line plot using a horizontal scale marked in whole number units.
	2.MDA.9	Collect, organize, and represent data with up to four categories using picture graphs and bar graphs with a single-unit scale.
	2.MDA.10	Draw conclusions from t-charts, object graphs, picture graphs, and bar graphs.

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Grade 3

South Carolina College- and Career-Ready Mathematical Process Standards

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A mathematically literate student can:

1. **Make sense of problems and persevere in solving them.**
    a. Relate a problem to prior knowledge.
    b. Recognize there may be multiple entry points to a problem and more than one path to a solution.
    c. Analyze what is given, what is not given, what is being asked, and what strategies are needed, and make an initial attempt to solve a problem.
    d. Evaluate the success of an approach to solve a problem and refine it if necessary.

2. **Reason both contextually and abstractly.**
    a. Make sense of quantities and their relationships in mathematical and real-world situations.
    b. Describe a given situation using multiple mathematical representations.
    c. Translate among multiple mathematical representations and compare the meanings each representation conveys about the situation.
    d. Connect the meaning of mathematical operations to the context of a given situation.

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3. **Use critical thinking skills to justify mathematical reasoning and critique the reasoning of others.**
    a. Construct and justify a solution to a problem.
    b. Compare and discuss the validity of various reasoning strategies.
    c. Make conjectures and explore their validity.
    d. Reflect on and provide thoughtful responses to the reasoning of others.

4. **Connect mathematical ideas and real-world situations through modeling.**
    a. Identify relevant quantities and develop a model to describe their relationships.
    b. Interpret mathematical models in the context of the situation.
    c. Make assumptions and estimates to simplify complicated situations.
    d. Evaluate the reasonableness of a model and refine if necessary.

5. **Use a variety of mathematical tools effectively and strategically.**
    a. Select and use appropriate tools when solving a mathematical problem.
    b. Use technological tools and other external mathematical resources to explore and deepen understanding of concepts.

6. **Communicate mathematically and approach mathematical situations with precision.**
    a. Express numerical answers with the degree of precision appropriate for the context of a situation.
    b. Represent numbers in an appropriate form according to the context of the situation.
    c. Use appropriate and precise mathematical language.
    d. Use appropriate units, scales, and labels.

7. **Identify and utilize structure and patterns.**
    a. Recognize complex mathematical objects as being composed of more than one simple object.
    b. Recognize mathematical repetition in order to make generalizations.
    c. Look for structures to interpret meaning and develop solution strategies.

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Grade 3

Key Concepts	Standards	
Number Sense and Base Ten	**The student will:**	
	3.NSBT.1	Use place value understanding to round whole numbers to the nearest 10 or 100.
	3.NSBT.2	Add and subtract whole numbers fluently to 1,000 using knowledge of place value and properties of operations.
	3.NSBT.3	Multiply one-digit whole numbers by multiples of 10 in the range 10 – 90, using knowledge of place value and properties of operations.
	3.NSBT.4	Read and write numbers through 999,999 in standard form and equations in expanded form.
	3.NSBT.5	Compare and order numbers through 999,999 and represent the comparison using the symbols >, =, or <.
Number Sense – Fractions	**The student will:**	
	3.NSF.1	Develop an understanding of fractions (i.e., denominators 2, 3, 4, 6, 8, 10) as numbers. a. A fraction $\frac{1}{b}$ (called a unit fraction) is the quantity formed by one part when a whole is partitioned into b equal parts; b. A fraction $\frac{a}{b}$ is the quantity formed by a parts of size $\frac{1}{b}$; c. A fraction is a number that can be represented on a number line based on counts of a unit fraction; d. A fraction can be represented using set, area, and linear models.
	3.NSF.2	Explain fraction equivalence (i.e., denominators 2, 3, 4, 6, 8, 10) by demonstrating an understanding that: a. two fractions are equal if they are the same size, based on the same whole, or at the same point on a number line; b. fraction equivalence can be represented using set, area, and linear models; c. whole numbers can be written as fractions (e.g., $4 = \frac{4}{1}$ and $1 = \frac{4}{4}$); d. fractions with the same numerator or same denominator can be compared by reasoning about their size based on the same whole.
	3.NSF.3	Develop an understanding of mixed numbers (i.e., denominators 2, 3, 4, 6, 8, 10) as iterations of unit fractions on a number line.

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Algebraic Thinking and Operations	**The student will:**	
	3.ATO.1	Use concrete objects, drawings and symbols to represent multiplication facts of two single-digit whole numbers and explain the relationship between the factors (i.e., 0 – 10) and the product.
	3.ATO.2	Use concrete objects, drawings and symbols to represent division without remainders and explain the relationship among the whole number quotient (i.e., 0 – 10), divisor (i.e., 0 – 10), and dividend.
	3.ATO.3	Solve real-world problems involving equal groups, area/array, and number line models using basic multiplication and related division facts. Represent the problem situation using an equation with a symbol for the unknown.
	3.ATO.4	Determine the unknown whole number in a multiplication or division equation relating three whole numbers when the unknown is a missing factor, product, dividend, divisor, or quotient.
	3.ATO.5	Apply properties of operations (i.e., Commutative Property of Multiplication, Associative Property of Multiplication, Distributive Property) as strategies to multiply and divide and explain the reasoning.
	3.ATO.6	Understand division as a missing factor problem.
	3.ATO.7	Demonstrate fluency with basic multiplication and related division facts of products and dividends through 100.
	3.ATO.8	Solve two-step real-world problems using addition, subtraction, multiplication and division of whole numbers and having whole number answers. Represent these problems using equations with a letter for the unknown quantity.
	3.ATO.9	Identify a rule for an arithmetic pattern (e.g., patterns in the addition table or multiplication table).
Geometry	**The student will:**	
	3.G.1	Understand that shapes in different categories (e.g., rhombus, rectangle, square, and other 4-sided shapes) may share attributes (e.g., 4-sided figures) and the shared attributes can define a larger category (e.g., quadrilateral). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.
	3.G.2	Partition two-dimensional shapes into 2, 3, 4, 6, or 8 parts with equal areas and express the area of each part using the same unit fraction. Recognize that equal parts of identical wholes need not have the same shape.
	3.G.3	Use a right angle as a benchmark to identify and sketch acute and obtuse angles.
	3.G.4	Identify a three-dimensional shape (i.e., right rectangular prism, right triangular prism, pyramid) based on a given two-dimensional net and explain the relationship between the shape and the net.

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Measurement and Data Analysis	**The student will:**	
	3.MDA.1	Use analog and digital clocks to determine and record time to the nearest minute, using *a.m.* and *p.m.*; measure time intervals in minutes; and solve problems involving addition and subtraction of time intervals within 60 minutes.
	3.MDA.2	Estimate and measure liquid volumes (capacity) in customary units (i.e., c., pt., qt., gal.) and metric units (mL, L) to the nearest whole unit.
	3.MDA.3	Collect, organize, classify, and interpret data with multiple categories and draw a scaled picture graph and a scaled bar graph to represent the data.
	3.MDA.4	Generate data by measuring length to the nearest inch, half-inch and quarter-inch and organize the data in a line plot using a horizontal scale marked off in appropriate units.
	3.MDA.5	Understand the concept of area measurement. a. Recognize area as an attribute of plane figures; b. Measure area by building arrays and counting standard unit squares; c. Determine the area of a rectilinear polygon and relate to multiplication and addition.
	3.MDA.6	Solve real-world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.

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Grade 4

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    a. Relate a problem to prior knowledge.
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    c. Analyze what is given, what is not given, what is being asked, and what strategies are needed, and make an initial attempt to solve a problem.
    d. Evaluate the success of an approach to solve a problem and refine it if necessary.

2. **Reason both contextually and abstractly.**
    a. Make sense of quantities and their relationships in mathematical and real-world situations.
    b. Describe a given situation using multiple mathematical representations.
    c. Translate among multiple mathematical representations and compare the meanings each representation conveys about the situation.
    d. Connect the meaning of mathematical operations to the context of a given situation.

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3. **Use critical thinking skills to justify mathematical reasoning and critique the reasoning of others.**
    a. Construct and justify a solution to a problem.
    b. Compare and discuss the validity of various reasoning strategies.
    c. Make conjectures and explore their validity.
    d. Reflect on and provide thoughtful responses to the reasoning of others.

4. **Connect mathematical ideas and real-world situations through modeling.**
    a. Identify relevant quantities and develop a model to describe their relationships.
    b. Interpret mathematical models in the context of the situation.
    c. Make assumptions and estimates to simplify complicated situations.
    d. Evaluate the reasonableness of a model and refine if necessary.

5. **Use a variety of mathematical tools effectively and strategically.**
    a. Select and use appropriate tools when solving a mathematical problem.
    b. Use technological tools and other external mathematical resources to explore and deepen understanding of concepts.

6. **Communicate mathematically and approach mathematical situations with precision.**
    a. Express numerical answers with the degree of precision appropriate for the context of a situation.
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7. **Identify and utilize structure and patterns.**
    a. Recognize complex mathematical objects as being composed of more than one simple object.
    b. Recognize mathematical repetition in order to make generalizations.
    c. Look for structures to interpret meaning and develop solution strategies.

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Grade 4

Key Concepts	Standards	
Number Sense and Base Ten	**The student will:**	
	4.NSBT.1	Understand that, in a multi-digit whole number, a digit represents ten times what the same digit represents in the place to its right.
	4.NSBT.2	Recognize math periods and number patterns within each period to read and write in standard form large numbers through 999,999,999.
	4.NSBT.3	Use rounding as one form of estimation and round whole numbers to any given place value.
	4.NSBT.4	Fluently add and subtract multi-digit whole numbers using strategies to include a standard algorithm.
	4.NSBT.5	Multiply up to a four-digit number by a one-digit number and multiply a two-digit number by a two-digit number using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using rectangular arrays, area models and/or equations.
	4.NSBT.6	Divide up to a four-digit dividend by a one-digit divisor using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division.
Number Sense and Operations – Fractions	**The student will:**	
	4.NSF.1	Explain why a fraction (i.e., denominators 2, 3, 4, 5, 6, 8, 10, 12, 25, 100), $\frac{a}{b}$, is equivalent to a fraction, $\frac{n \times a}{n \times b}$, by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.
	4.NSF.2	Compare two given fractions (i.e., denominators 2, 3, 4, 5, 6, 8, 10, 12, 25, 100) by creating common denominators or numerators, or by comparing to a benchmark fraction such as $\frac{1}{2}$ and represent the comparison using the symbols >, =, or <.
	4.NSF.3	Develop an understanding of addition and subtraction of fractions (i.e., denominators 2, 3, 4, 5, 6, 8, 10, 12, 25, 100) based on unit fractions. a. Compose and decompose a fraction in more than one way, recording each composition and decomposition as an addition or subtraction equation; b. Add and subtract mixed numbers with like denominators; c. Solve real-world problems involving addition and subtraction of fractions referring to the same whole and having like denominators.
	4.NSF.4	Apply and extend an understanding of multiplication by multiplying a whole number and a fraction (i.e., denominators 2, 3, 4, 5, 6, 8, 10, 12, 25, 100). a. Understand a fraction $\frac{a}{b}$ as a multiple of $\frac{1}{b}$; b. Understand a multiple of $\frac{a}{b}$ as a multiple of $\frac{1}{b}$, and use this understanding to multiply a fraction by a whole number; c. Solve real-world problems involving multiplication of a fraction by a whole number (i.e., use visual fraction models and equations to represent the problem).

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	4.NSF.5	Express a fraction with a denominator of 10 as an equivalent fraction with a denominator of 100 and use this technique to add two fractions with respective denominators of 10 and 100.
	4.NSF.6	Write a fraction with a denominator of 10 or 100 using decimal notation, and read and write a decimal number as a fraction.
	4.NSF.7	Compare and order decimal numbers to hundredths, and justify using concrete and visual models.
Algebraic Thinking and Operations	**The student will:**	
	4.ATO.1	Interpret a multiplication equation as a comparison (e.g. interpret 35 = 5x7 as a statement that 35 is 5 times as many as 7 and 7 times as many as 5.) Represent verbal statements of multiplicative comparisons as multiplication equations.
	4.ATO.2	Solve real-world problems using multiplication (product unknown) and division (group size unknown, number of groups unknown).
	4.ATO.3	Solve multi-step, real-world problems using the four operations. Represent the problem using an equation with a variable as the unknown quantity.
	4.ATO.4	Recognize that a whole number is a multiple of each of its factors. Find all factors for a whole number in the range 1 – 100 and determine whether the whole number is prime or composite.
	4.ATO.5	Generate a number or shape pattern that follows a given rule and determine a term that appears later in the sequence.
Geometry	**The student will:**	
	4.G.1	Draw points, lines, line segments, rays, angles (i.e., right, acute, obtuse), and parallel and perpendicular lines. Identify these in two-dimensional figures.
	4.G.2	Classify quadrilaterals based on the presence or absence of parallel or perpendicular lines.
	4.G.3	Recognize right triangles as a category, and identify right triangles.
	4.G.4	Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.
Measurement and Data Analysis	**The student will:**	
	4.MDA.1	Convert measurements within a single system of measurement, customary (i.e., in., ft., yd., oz., lb., sec., min., hr.) or metric (i.e., cm, m, km, g, kg, mL, L) from a larger to a smaller unit.
	4.MDA.2	Solve real-world problems involving distance/length, intervals of time within 12 hours, liquid volume, mass, and money using the four operations.
	4.MDA.3	Apply the area and perimeter formulas for rectangles.
	4.MDA.4	Create a line plot to display a data set (i.e., generated by measuring length to the nearest quarter-inch and eighth-inch) and interpret the line plot.
	4.MDA.5	Understand the relationship of an angle measurement to a circle.
	4.MDA.6	Measure and draw angles in whole number degrees using a protractor.
	4.MDA.7	Solve addition and subtraction problems to find unknown angles in real-world and mathematical problems.
	4.MDA.8	Determine the value of a collection of coins and bills greater than $1.00.

DO NOT DUPLICATE

Grade 5

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    d. Evaluate the success of an approach to solve a problem and refine it if necessary.

2. **Reason both contextually and abstractly.**
    a. Make sense of quantities and their relationships in mathematical and real-world situations.
    b. Describe a given situation using multiple mathematical representations.
    c. Translate among multiple mathematical representations and compare the meanings each representation conveys about the situation.
    d. Connect the meaning of mathematical operations to the context of a given situation.

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    a. Construct and justify a solution to a problem.
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    b. Recognize mathematical repetition in order to make generalizations.
    c. Look for structures to interpret meaning and develop solution strategies.

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Grade 5

Key Concepts	Standards	
Number Sense and Base Ten	**The student will:**	
	5.NSBT.1	Understand that, in a multi-digit whole number, a digit in one place represents 10 times what the same digit represents in the place to its right, and represents $\frac{1}{10}$ times what the same digit represents in the place to its left.
	5.NSBT.2	Use whole number exponents to explain: a. patterns in the number of zeroes of the product when multiplying a number by powers of 10; b. patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10.
	5.NSBT.3	Read and write decimals in standard and expanded form. Compare two decimal numbers to the thousandths using the symbols >, =, or <.
	5.NSBT.4	Round decimals to any given place value within thousandths.
	5.NSBT.5	Fluently multiply multi-digit whole numbers using strategies to include a standard algorithm.
	5.NSBT.6	Divide up to a four-digit dividend by a two-digit divisor, using strategies based on place value, the properties of operations, and the relationship between multiplication and division.
	5.NSBT.7	Add, subtract, multiply, and divide decimal numbers to hundredths using concrete area models and drawings.
Number Sense and Operations – Fractions	**The student will:**	
	5.NSF.1	Add and subtract fractions with unlike denominators (including mixed numbers) using a variety of models, including an area model and number line.
	5.NSF.2	Solve real-world problems involving addition and subtraction of fractions with unlike denominators.
	5.NSF.3	Understand the relationship between fractions and division of whole numbers by interpreting a fraction as the numerator divided by the denominator (i.e., $\frac{a}{b} = a \div b$).
	5.NSF.4	Extend the concept of multiplication to multiply a fraction or whole number by a fraction. a. Recognize the relationship between multiplying fractions and finding the areas of rectangles with fractional side lengths; b. Interpret multiplication of a fraction by a whole number and a whole number by a fraction and compute the product; c. Interpret multiplication in which both factors are fractions less than one and compute the product.

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	5.NSF.5	Justify the reasonableness of a product when multiplying with fractions. a. Estimate the size of the product based on the size of the two factors; b. Explain why multiplying a given number by a number greater than 1 (e.g., improper fractions, mixed numbers, whole numbers) results in a product larger than the given number; c. Explain why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; d. Explain why multiplying the numerator and denominator by the same number has the same effect as multiplying the fraction by 1.
	5.NSF.6	Solve real-world problems involving multiplication of a fraction by a fraction, improper fraction and a mixed number.
	5.NSF.7	Extend the concept of division to divide unit fractions and whole numbers by using visual fraction models and equations. a. Interpret division of a unit fraction by a non-zero whole number and compute the quotient; b. Interpret division of a whole number by a unit fraction and compute the quotient.
	5.NSF.8	Solve real-world problems involving division of unit fractions and whole numbers, using visual fraction models and equations.
Algebraic Thinking and Operations	**The student will:**	
	5.ATO.1	Evaluate numerical expressions involving grouping symbols (i.e., parentheses, brackets, braces).
	5.ATO.2	Translate verbal phrases into numerical expressions and interpret numerical expressions as verbal phrases.
	5.ATO.3	Investigate the relationship between two numerical patterns. a. Generate two numerical patterns given two rules and organize in tables; b. Translate the two numerical patterns into two sets of ordered pairs; c. Graph the two sets of ordered pairs on the same coordinate plane; d. Identify the relationship between the two numerical patterns.
Geometry	**The student will:**	
	5.G.1	Define a coordinate system. a. The *x*- and *y*- axes are perpendicular number lines that intersect at 0 (the origin); b. Any point on the coordinate plane can be represented by its coordinates; c. The first number in an ordered pair is the *x*-coordinate and represents the horizontal distance from the origin; d. The second number in an ordered pair is the *y*-coordinate and represents the vertical distance from the origin.
	5.G.2	Plot and interpret points in the first quadrant of the coordinate plane to represent real-world and mathematical situations.
	5.G.3	Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category.
	5.G.4	Classify two-dimensional figures in a hierarchy based on their attributes.

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Measurement and Data Analysis	**The student will:**	
	5.MDA.1	Convert measurements within a single system of measurement: customary (i.e., in., ft., yd., oz., lb., sec., min., hr.) or metric (i.e., mm, cm, m, km, g, kg, mL, L) from a larger to a smaller unit and a smaller to a larger unit.
	5.MDA.2	Create a line plot consisting of unit fractions and use operations on fractions to solve problems related to the line plot.
	5.MDA.3	Understand the concept of volume measurement. a. Recognize volume as an attribute of right rectangular prisms; b. Relate volume measurement to the operations of multiplication and addition by packing right rectangular prisms and then counting the layers of standard unit cubes; c. Determine the volume of right rectangular prisms using the formula derived from packing right rectangular prisms and counting the layers of standard unit cubes.
	5.MDA.4	Differentiate among perimeter, area and volume and identify which application is appropriate for a given situation.

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South Carolina College- and Career-Ready Standards for Mathematics
Overview for Grades 6 – 8

This overview illustrates relationships among mathematical concepts. In grades 6 – 8, it is important for students to broaden their understanding of the interconnectedness of mathematical concepts that were introduced in grades K – 5 and will continue throughout grades 9 – 12 and beyond.

The South Carolina College- and Career-Ready (SCCCR) Content Standards for Mathematics for grades 6 – 8 are divided into Key Concepts that organize the content into broad categories of related standards. Neither the order of Key Concepts nor the order of individual standards within a Key Concept is intended to prescribe an instructional sequence. The standards should serve as the basis for development of curriculum, instruction, and assessment.

The Key Concepts vary throughout the three grade levels and two major shifts occur. The Key Concept shifts from Data Analysis and Statistics (DS) in grade 6 to Data Analysis, Statistics, and Probability (DSP) in grades 7 and 8 because probability is not introduced until grade 7 and continues with relative frequencies in grade 8. Students in grades 6 and 7 focus on the key concept of Ratios and Proportional Relationships (RP); however, this Key Concept is replaced by Functions (F) in grade 8.

The table below shows the progression of the Key Concepts across grades 6 – 8.

Key Concepts by Grade Band

Grade 6	Grade 7	Grade 8
Number System	Number System	Number System
Ratios and Proportional Relationships	Ratios and Proportional Relationships	**Functions**
Expressions, Equations, and Inequalities	Expressions, Equations, and Inequalities	Expressions, Equations, and Inequalities
Geometry and Measurement	Geometry and Measurement	Geometry and Measurement
Data Analysis and Statistics	**Data Analysis, Statistics, and Probability**	**Data Analysis, Statistics, and Probability**

Specific vocabulary is used throughout the SCCCR Content Standards for Mathematics for grades 6 – 8 to indicate various levels of understanding. The only terminology defined below is terminology that could be misinterpreted.

- The words *investigate* and *explore* indicate the initial understanding of a concept. For example:
  - 7.DSP.6: *Investigate* the relationship between theoretical and experimental probabilities for simple events.

    This standard indicates an initial understanding of theoretical and experimental probabilities. The educator may consider using inquiry-based methods to introduce this concept.

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- 8.EEI.3: *Explore* the relationship between quantities in decimal and scientific notation.

  This standard indicates an initial understanding of scientific notation. The educator may consider using inquiry-based methods to introduce this concept.

- Once students have an initial understanding, they are asked to *apply* this knowledge, often in real-world and mathematical situations. For example:

  - 7.DSP.7: *Apply* the concepts of theoretical and experimental probabilities for simple events.

    The standard 7.DSP.6 indicates an initial understanding of theoretical and experimental probabilities while the standard 7.DSP.7 requires students to apply this knowledge.

  - 8.EEI.4: *Apply* the concepts of decimal and scientific notation to solve real-world and mathematical problems.

    The standard 8.EEI.3 indicates an initial understanding of the relationship between decimal and scientific notation while the standard 8.EEI.4 requires students to apply this knowledge.

- When standards expand upon the previous knowledge of students, the standard indicates that students will *extend* their knowledge. For these standards, educators should assist students in building upon previous knowledge to enrich their understanding of the interconnectedness of mathematics. For example:

  - 6.NS.8: *Extend* knowledge of the coordinate plane to solve real-world and mathematical problems involving rational numbers.

    In grade 5, students explore graphing ordered pairs in the first quadrant of the coordinate plane. This grade 6 standard extends that knowledge to include all four quadrants as a result of the introduction of integers.

- The word *discover* in a standard indicates that students will be given the opportunity to determine a formula through the use of manipulatives or inquiry-based activities. For example:

  - 6.GM.2: Use visual models (e.g., model by packing) to *discover* that the formulas for the volume of a right rectangular prism ($V = lwh, V = Bh$) are the same for whole or fractional edge lengths. Apply these formulas to solve real-world and mathematical problems.

    In grade 5, students discovered the formulas for the volume of a right rectangular prism with whole number edge lengths. In grade 6, students build on that knowledge by rediscovering the formulas for the volume of a right rectangular prism with fractional edge lengths. Students should be allowed to determine this formula on their own and make a connection with the formulas discovered in grade 5.

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- The phrases *translate among* and *translate between* are often associated with multiple representations of a concept and indicate that given representations *a* and *b*, students must be able to convert from *a* to *b* and vice versa. For example:
    - 7.GM.1: Determine the scale factor and *translate between* scale models and actual measurements (e.g., lengths, area) of real-world objects and geometric figures using proportional reasoning.

      For this standard, students may be given the measurements of a scale model and asked to determine the corresponding measurements of an actual object. Conversely, they may also be given the measurements of an actual object and asked to determine the corresponding measurements of a scale model.

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Grade 6

South Carolina College- and Career-Ready Mathematical Process Standards

The South Carolina College- and Career-Ready (SCCCR) Mathematical Process Standards demonstrate the ways in which students develop conceptual understanding of mathematical content and apply mathematical skills. As a result, the SCCCR Mathematical Process Standards should be integrated within the SCCCR Content Standards for Mathematics for each grade level and course. Since the process standards drive the pedagogical component of teaching and serve as the means by which students should demonstrate understanding of the content standards, the process standards must be incorporated as an integral part of overall student expectations when assessing content understanding.

Students who are college- and career-ready take a productive and confident approach to mathematics. They are able to recognize that mathematics is achievable, sensible, useful, doable, and worthwhile. They also perceive themselves as effective learners and practitioners of mathematics and understand that a consistent effort in learning mathematics is beneficial.

The Program for International Student Assessment defines mathematical literacy as "an individual's capacity to formulate, employ, and interpret mathematics in a variety of contexts. It includes reasoning mathematically and using mathematical concepts, procedures, facts, and tools to describe, explain, and predict phenomena. It assists individuals to recognize the role that mathematics plays in the world and to make the well-founded judgments and decisions needed by constructive, engaged and reflective citizens" (Organization for Economic Cooperation and Development, 2012).

A mathematically literate student can:

1. **Make sense of problems and persevere in solving them.**
    a. Relate a problem to prior knowledge.
    b. Recognize there may be multiple entry points to a problem and more than one path to a solution.
    c. Analyze what is given, what is not given, what is being asked, and what strategies are needed, and make an initial attempt to solve a problem.
    d. Evaluate the success of an approach to solve a problem and refine it if necessary.

2. **Reason both contextually and abstractly.**
    a. Make sense of quantities and their relationships in mathematical and real-world situations.
    b. Describe a given situation using multiple mathematical representations.
    c. Translate among multiple mathematical representations and compare the meanings each representation conveys about the situation.
    d. Connect the meaning of mathematical operations to the context of a given situation.

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3. **Use critical thinking skills to justify mathematical reasoning and critique the reasoning of others.**
    a. Construct and justify a solution to a problem.
    b. Compare and discuss the validity of various reasoning strategies.
    c. Make conjectures and explore their validity.
    d. Reflect on and provide thoughtful responses to the reasoning of others.

4. **Connect mathematical ideas and real-world situations through modeling.**
    a. Identify relevant quantities and develop a model to describe their relationships.
    b. Interpret mathematical models in the context of the situation.
    c. Make assumptions and estimates to simplify complicated situations.
    d. Evaluate the reasonableness of a model and refine if necessary.

5. **Use a variety of mathematical tools effectively and strategically.**
    a. Select and use appropriate tools when solving a mathematical problem.
    b. Use technological tools and other external mathematical resources to explore and deepen understanding of concepts.

6. **Communicate mathematically and approach mathematical situations with precision.**
    a. Express numerical answers with the degree of precision appropriate for the context of a situation.
    b. Represent numbers in an appropriate form according to the context of the situation.
    c. Use appropriate and precise mathematical language.
    d. Use appropriate units, scales, and labels.

7. **Identify and utilize structure and patterns.**
    a. Recognize complex mathematical objects as being composed of more than one simple object.
    b. Recognize mathematical repetition in order to make generalizations.
    c. Look for structures to interpret meaning and develop solution strategies.

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Grade 6

Key Concepts	Standards	
The Number System	**The student will:**	
	6.NS.1	Compute and represent quotients of positive fractions using a variety of procedures (e.g., visual models, equations, and real-world situations).
	6.NS.2	Fluently divide multi-digit whole numbers using a standard algorithmic approach.
	6.NS.3	Fluently add, subtract, multiply and divide multi-digit decimal numbers using a standard algorithmic approach.
	6.NS.4	Find common factors and multiples using two whole numbers. a. Compute the greatest common factor (GCF) of two numbers both less than or equal to 100. b. Compute the least common multiple (LCM) of two numbers both less than or equal to 12. c. Express sums of two whole numbers, each less than or equal to 100, using the distributive property to factor out a common factor of the original addends.
	6.NS.5	Understand that the positive and negative representations of a number are opposites in direction and value. Use integers to represent quantities in real-world situations and explain the meaning of zero in each situation.
	6.NS.6	Extend the understanding of the number line to include all rational numbers and apply this concept to the coordinate plane. a. Understand the concept of opposite numbers, including zero, and their relative locations on the number line. b. Understand that the signs of the coordinates in ordered pairs indicate their location on an axis or in a quadrant on the coordinate plane. c. Recognize when ordered pairs are reflections of each other on the coordinate plane across one axis, both axes, or the origin. d. Plot rational numbers on number lines and ordered pairs on coordinate planes.
	6.NS.7	Understand and apply the concepts of comparing, ordering, and finding absolute value to rational numbers. a. Interpret statements using equal to (=) and not equal to (≠). b. Interpret statements using less than (<), greater than (>), and equal to (=) as relative locations on the number line. c. Use concepts of equality and inequality to write and to explain real-world and mathematical situations. d. Understand that absolute value represents a number's distance from zero on the number line and use the absolute value of a rational number to represent real-world situations. e. Recognize the difference between comparing absolute values and ordering rational numbers. For negative rational numbers, understand that as the absolute value increases, the value of the negative number decreases.

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	6.NS.8	Extend knowledge of the coordinate plane to solve real-world and mathematical problems involving rational numbers. a. Plot points in all four quadrants to represent the problem. b. Find the distance between two points when ordered pairs have the same *x*-coordinates or same *y*-coordinates. c. Relate finding the distance between two points in a coordinate plane to absolute value using a number line.
	6.NS.9	Investigate and translate among multiple representations of rational numbers (fractions, decimal numbers, percentages). Fractions should be limited to those with denominators of 2, 3, 4, 5, 8, 10, and 100.
Ratios and Proportional Relationships	**The student will:**	
	6.RP.1	Interpret the concept of a ratio as the relationship between two quantities, including part to part and part to whole.
	6.RP.2	Investigate relationships between ratios and rates. a. Translate between multiple representations of ratios (i.e., a/b, $a{:}\,b$, a to b, visual models). b. Recognize that a rate is a type of ratio involving two different units. c. Convert from rates to unit rates.
	6.RP.3	Apply the concepts of ratios and rates to solve real-world and mathematical problems. a. Create a table consisting of equivalent ratios and plot the results on the coordinate plane. b. Use multiple representations, including tape diagrams, tables, double number lines, and equations, to find missing values of equivalent ratios. c. Use two tables to compare related ratios. d. Apply concepts of unit rate to solve problems, including unit pricing and constant speed. e. Understand that a percentage is a rate per 100 and use this to solve problems involving wholes, parts, and percentages. f. Solve one-step problems involving ratios and unit rates (e.g., dimensional analysis).
Expressions, Equations, and Inequalities	**The student will:**	
	6.EEI.1	Write and evaluate numerical expressions involving whole-number exponents and positive rational number bases using the Order of Operations.
	6.EEI.2	Extend the concepts of numerical expressions to algebraic expressions involving positive rational numbers. a. Translate between algebraic expressions and verbal phrases that include variables. b. Investigate and identify parts of algebraic expressions using mathematical terminology, including term, coefficient, constant, and factor. c. Evaluate real-world and algebraic expressions for specific values using the Order of Operations. Grouping symbols should be limited to parentheses, braces, and brackets. Exponents should be limited to whole-numbers.

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	6.EEI.3	Apply mathematical properties (e.g., commutative, associative, distributive) to generate equivalent expressions.
	6.EEI.4	Apply mathematical properties (e.g., commutative, associative, distributive) to justify that two expressions are equivalent.
	6.EEI.5	Understand that if any solutions exist, the solution set for an equation or inequality consists of values that make the equation or inequality true.
	6.EEI.6	Write expressions using variables to represent quantities in real-world and mathematical situations. Understand the meaning of the variable in the context of the situation.
	6.EEI.7	Write and solve one-step linear equations in one variable involving nonnegative rational numbers for real-world and mathematical situations.
	6.EEI.8	Extend knowledge of inequalities used to compare numerical expressions to include algebraic expressions in real-world and mathematical situations. a. Write an inequality of the form $x > c$ or $x < c$ and graph the solution set on a number line. b. Recognize that inequalities have infinitely many solutions.
	6.EEI.9	Investigate multiple representations of relationships in real-world and mathematical situations. a. Write an equation that models a relationship between independent and dependent variables. b. Analyze the relationship between independent and dependent variables using graphs and tables. c. Translate among graphs, tables, and equations.
Geometry and Measurement	**The student will:**	
	6.GM.1	Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.
	6.GM.2	Use visual models (e.g., model by packing) to discover that the formulas for the volume of a right rectangular prism ($V = lwh, V = Bh$) are the same for whole or fractional edge lengths. Apply these formulas to solve real-world and mathematical problems.
	6.GM.3	Apply the concepts of polygons and the coordinate plane to real-world and mathematical situations. a. Given coordinates of the vertices, draw a polygon in the coordinate plane. b. Find the length of an edge if the vertices have the same *x*-coordinates or same *y*-coordinates.
	6.GM.4	Unfold three-dimensional figures into two-dimensional rectangles and triangles (nets) to find the surface area and to solve real-world and mathematical problems.

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Data Analysis and Statistics	**The student will:**	
	6.DS.1	Differentiate between statistical and non-statistical questions.
	6.DS.2	Use center (mean, median, mode), spread (range, interquartile range, mean absolute value), and shape (symmetrical, skewed left, skewed right) to describe the distribution of a set of data collected to answer a statistical question.
	6.DS.3	Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number.
	6.DS.4	Select and create an appropriate display for numerical data, including dot plots, histograms, and box plots.
	6.DS.5	Describe numerical data sets in relation to their real-world context. a. State the sample size. b. Describe the qualitative aspects of the data (e.g., how it was measured, units of measurement). c. Give measures of center (median, mean). d. Find measures of variability (interquartile range, mean absolute deviation) using a number line. e. Describe the overall pattern (shape) of the distribution. f. Justify the choices for measure of center and measure of variability based on the shape of the distribution. g. Describe the impact that inserting or deleting a data point has on the measures of center (median, mean) for a data set.

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Grade 7

South Carolina College- and Career-Ready Mathematical Process Standards

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A mathematically literate student can:

1. **Make sense of problems and persevere in solving them.**
    a. Relate a problem to prior knowledge.
    b. Recognize there may be multiple entry points to a problem and more than one path to a solution.
    c. Analyze what is given, what is not given, what is being asked, and what strategies are needed, and make an initial attempt to solve a problem.
    d. Evaluate the success of an approach to solve a problem and refine it if necessary.

2. **Reason both contextually and abstractly.**
    a. Make sense of quantities and their relationships in mathematical and real-world situations.
    b. Describe a given situation using multiple mathematical representations.
    c. Translate among multiple mathematical representations and compare the meanings each representation conveys about the situation.
    d. Connect the meaning of mathematical operations to the context of a given situation.

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3. **Use critical thinking skills to justify mathematical reasoning and critique the reasoning of others.**
    a. Construct and justify a solution to a problem.
    b. Compare and discuss the validity of various reasoning strategies.
    c. Make conjectures and explore their validity.
    d. Reflect on and provide thoughtful responses to the reasoning of others.

4. **Connect mathematical ideas and real-world situations through modeling.**
    a. Identify relevant quantities and develop a model to describe their relationships.
    b. Interpret mathematical models in the context of the situation.
    c. Make assumptions and estimates to simplify complicated situations.
    d. Evaluate the reasonableness of a model and refine if necessary.

5. **Use a variety of mathematical tools effectively and strategically.**
    a. Select and use appropriate tools when solving a mathematical problem.
    b. Use technological tools and other external mathematical resources to explore and deepen understanding of concepts.

6. **Communicate mathematically and approach mathematical situations with precision.**
    a. Express numerical answers with the degree of precision appropriate for the context of a situation.
    b. Represent numbers in an appropriate form according to the context of the situation.
    c. Use appropriate and precise mathematical language.
    d. Use appropriate units, scales, and labels.

7. **Identify and utilize structure and patterns.**
    a. Recognize complex mathematical objects as being composed of more than one simple object.
    b. Recognize mathematical repetition in order to make generalizations.
    c. Look for structures to interpret meaning and develop solution strategies.

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Grade 7

Key Concepts	Standards
The Number System	**The student will:**
	7.NS.1 Extend prior knowledge of operations with positive rational numbers to add and to subtract all rational numbers and represent the sum or difference on a number line. a. Understand that the additive inverse of a number is its opposite and their sum is equal to zero. b. Understand that the sum of two rational numbers ($p + q$) represents a distance from p on the number line equal to $\|q\|$ where the direction is indicated by the sign of q. c. Translate between the subtraction of rational numbers and addition using the additive inverse, $p - q = p + (-q)$. d. Demonstrate that the distance between two rational numbers on the number line is the absolute value of their difference. e. Apply mathematical properties (e.g., commutative, associative, distributive, or the properties of identity and inverse elements) to add and subtract rational numbers.
	7.NS.2 Extend prior knowledge of operations with positive rational numbers to multiply and to divide all rational numbers. a. Understand that the multiplicative inverse of a number is its reciprocal and their product is equal to one. b. Understand sign rules for multiplying rational numbers. c. Understand sign rules for dividing rational numbers and that a quotient of integers (with a non-zero divisor) is a rational number. d. Apply mathematical properties (e.g., commutative, associative, distributive, or the properties of identity and inverse elements) to multiply and divide rational numbers. e. Understand that some rational numbers can be written as integers and all rational numbers can be written as fractions or decimal numbers that terminate or repeat.
	7.NS.3 Apply the concepts of all four operations with rational numbers to solve real-world and mathematical problems.
	7.NS.4 Understand and apply the concepts of comparing and ordering to rational numbers. a. Interpret statements using less than (<), greater than (>), less than or equal to (≤), greater than or equal to (≥), and equal to (=) as relative locations on the number line. b. Use concepts of equality and inequality to write and explain real-world and mathematical situations.
	7.NS.5 Extend prior knowledge to translate among multiple representations of rational numbers (fractions, decimal numbers, percentages). Exclude the conversion of repeating decimal numbers to fractions.

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Ratios and Proportional Relationships	**The student will:**	
	7.RP.1	Compute unit rates, including those involving complex fractions, with like or different units.
	7.RP.2	Identify and model proportional relationships given multiple representations, including tables, graphs, equations, diagrams, verbal descriptions, and real-world situations. a. Determine when two quantities are in a proportional relationship. b. Recognize or compute the constant of proportionality. c. Understand that the constant of proportionality is the unit rate. d. Use equations to model proportional relationships. e. Investigate the graph of a proportional relationship and explain the meaning of specific points (e.g., origin, unit rate) in the context of the situation.
	7.RP.3	Solve real-world and mathematical problems involving ratios and percentages using proportional reasoning (e.g., multi-step dimensional analysis, percent increase/decrease, tax).
Expressions, Equations, and Inequalities	**The student will:**	
	7.EEI.1	Apply mathematical properties (e.g., commutative, associative, distributive) to simplify and to factor linear algebraic expressions with rational coefficients.
	7.EEI.2	Recognize that algebraic expressions may have a variety of equivalent forms and determine an appropriate form for a given real-world situation.
	7.EEI.3	Extend previous understanding of Order of Operations to solve multi-step real-world and mathematical problems involving rational numbers. Include fraction bars as a grouping symbol.
	7.EEI.4	Apply the concepts of linear equations and inequalities in one variable to real-world and mathematical situations. a. Write and fluently solve linear equations of the form $ax + b = c$ and $a(x + b) = c$ where a, b, and c are rational numbers. b. Write and solve multi-step linear equations that include the use of the distributive property and combining like terms. Exclude equations that contain variables on both sides. c. Write and solve two-step linear inequalities. Graph the solution set on a number line and interpret its meaning. d. Identify and justify the steps for solving multi-step linear equations and two-step linear inequalities.
	7.EEI.5	Understand and apply the laws of exponents (i.e., product rule, quotient rule, power to a power, product to a power, quotient to a power, zero power property) to simplify numerical expressions that include whole-number exponents.

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Geometry and Measurement	**The student will:**	
	7.GM.1	Determine the scale factor and translate between scale models and actual measurements (e.g., lengths, area) of real-world objects and geometric figures using proportional reasoning.
	7.GM.2	Construct triangles and special quadrilaterals using a variety of tools (e.g., freehand, ruler and protractor, technology). a. Construct triangles given all measurements of either angles or sides. b. Decide if the measurements determine a unique triangle, more than one triangle, or no triangle. c. Construct special quadrilaterals (i.e., kite, trapezoid, isosceles trapezoid, rhombus, parallelogram, rectangle) given specific parameters about angles or sides.
	7.GM.3	Describe two-dimensional cross-sections of three-dimensional figures, specifically right rectangular prisms and right rectangular pyramids.
	7.GM.4	Investigate the concept of circles. a. Demonstrate an understanding of the proportional relationships between diameter, radius, and circumference of a circle. b. Understand that the constant of proportionality between the circumference and diameter is equivalent to π. c. Explore the relationship between circumference and area using a visual model. d. Use the formulas for circumference and area of circles appropriately to solve real-world and mathematical problems.
	7.GM.5	Write equations to solve problems involving the relationships between angles formed by two intersecting lines, including supplementary, complementary, vertical, and adjacent.
	7.GM.6	Apply the concepts of two- and three-dimensional figures to real-world and mathematical situations. a. Understand that the concept of area is applied to two-dimensional figures such as triangles, quadrilaterals, and polygons. b. Understand that the concepts of volume and surface area are applied to three-dimensional figures such as cubes, right rectangular prisms, and right triangular prisms. c. Decompose cubes, right rectangular prisms, and right triangular prisms into rectangles and triangles to derive the formulas for volume and surface area. d. Use the formulas for area, volume, and surface area appropriately.

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Data Analysis, Statistics, and Probability	**The student will:**	
	7.DSP.1	Investigate concepts of random sampling. a. Understand that a sample is a subset of a population and both possess the same characteristics. b. Differentiate between random and non-random sampling. c. Understand that generalizations from a sample are valid only if the sample is representative of the population. d. Understand that random sampling is used to gather a representative sample and supports valid inferences about the population.
	7.DSP.2	Draw inferences about a population by collecting multiple random samples of the same size to investigate variability in estimates of the characteristic of interest.
	7.DSP.3	Visually compare the centers, spreads, and overlap of two displays of data (i.e., dot plots, histograms, box plots) that are graphed on the same scale and draw inferences about this data.
	7.DSP.4	Compare the numerical measures of center (mean, median, mode) and variability (range, interquartile range, mean absolute deviation) from two random samples to draw inferences about the populations.
	7.DSP.5	Investigate the concept of probability of chance events. a. Determine probabilities of simple events. b. Understand that probability measures likelihood of a chance event occurring. c. Understand that the probability of a chance event is a number between 0 and 1. d. Understand that a probability closer to 1 indicates a likely chance event. e. Understand that a probability close to $\frac{1}{2}$ indicates that a chance event is neither likely nor unlikely. f. Understand that a probability closer to 0 indicates an unlikely chance event.
	7.DSP.6	Investigate the relationship between theoretical and experimental probabilities for simple events. a. Determine approximate outcomes using theoretical probability. b. Perform experiments that model theoretical probability. c. Compare theoretical and experimental probabilities.
	7.DSP.7	Apply the concepts of theoretical and experimental probabilities for simple events. a. Differentiate between uniform and non-uniform probability models (distributions). b. Develop both uniform and non-uniform probability models. c. Perform experiments to test the validity of probability models.
	7.DSP.8	Extend the concepts of simple events to investigate compound events. a. Understand that the probability of a compound event is between 0 and 1. b. Identify the outcomes in a sample space using organized lists, tables, and tree diagrams. c. Determine probabilities of compound events using organized lists, tables, and tree diagrams. d. Design and use simulations to collect data and determine probabilities. e. Compare theoretical and experimental probabilities for compound events.

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Grade 8

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    c. Analyze what is given, what is not given, what is being asked, and what strategies are needed, and make an initial attempt to solve a problem.
    d. Evaluate the success of an approach to solve a problem and refine it if necessary.

2. **Reason both contextually and abstractly.**
    a. Make sense of quantities and their relationships in mathematical and real-world situations.
    b. Describe a given situation using multiple mathematical representations.
    c. Translate among multiple mathematical representations and compare the meanings each representation conveys about the situation.
    d. Connect the meaning of mathematical operations to the context of a given situation.

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3. **Use critical thinking skills to justify mathematical reasoning and critique the reasoning of others.**
    a. Construct and justify a solution to a problem.
    b. Compare and discuss the validity of various reasoning strategies.
    c. Make conjectures and explore their validity.
    d. Reflect on and provide thoughtful responses to the reasoning of others.

4. **Connect mathematical ideas and real-world situations through modeling.**
    a. Identify relevant quantities and develop a model to describe their relationships.
    b. Interpret mathematical models in the context of the situation.
    c. Make assumptions and estimates to simplify complicated situations.
    d. Evaluate the reasonableness of a model and refine if necessary.

5. **Use a variety of mathematical tools effectively and strategically.**
    a. Select and use appropriate tools when solving a mathematical problem.
    b. Use technological tools and other external mathematical resources to explore and deepen understanding of concepts.

6. **Communicate mathematically and approach mathematical situations with precision.**
    a. Express numerical answers with the degree of precision appropriate for the context of a situation.
    b. Represent numbers in an appropriate form according to the context of the situation.
    c. Use appropriate and precise mathematical language.
    d. Use appropriate units, scales, and labels.

7. **Identify and utilize structure and patterns.**
    a. Recognize complex mathematical objects as being composed of more than one simple object.
    b. Recognize mathematical repetition in order to make generalizations.
    c. Look for structures to interpret meaning and develop solution strategies.

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Grade 8

Key Concepts	Standards	
The Number System	**The student will:**	
	8.NS.1	Explore the real number system and its appropriate usage in real-world situations. a. Recognize the differences between rational and irrational numbers. b. Understand that all real numbers have a decimal expansion. c. Model the hierarchy of the real number system, including natural, whole, integer, rational, and irrational numbers.
	8.NS.2	Estimate and compare the value of irrational numbers by plotting them on a number line.
	8.NS.3	Extend prior knowledge to translate among multiple representations of rational numbers (fractions, decimal numbers, percentages). Include the conversion of repeating decimal numbers to fractions.
Functions	**The student will:**	
	8.F.1	Explore the concept of functions. a. Understand that a function assigns to each input exactly one output. b. Relate inputs (x-values or domain) and outputs (y-values or range) to independent and dependent variables. c. Translate among the multiple representations of a function, including mappings, tables, graphs, equations, and verbal descriptions. d. Determine if a relation is a function using multiple representations, including mappings, tables, graphs, equations, and verbal descriptions. e. Graph a function from a table of values. Understand that the graph and table both represent a set of ordered pairs of that function.
	8.F.2	Compare multiple representations of two functions, including mappings, tables, graphs, equations, and verbal descriptions, in order to draw conclusions.
	8.F.3	Investigate the differences between linear and nonlinear functions using multiple representations (i.e. tables, graphs, equations, and verbal descriptions). a. Define an equation in slope-intercept form ($y = mx + b$) as being a linear function. b. Recognize that the graph of a linear function has a constant rate of change. c. Provide examples of nonlinear functions.
	8.F.4	Apply the concepts of linear functions to real-world and mathematical situations. a. Understand that the slope is the constant rate of change and the y-intercept is the point where $x = 0$. b. Determine the slope and the y-intercept of a linear function given multiple representations, including two points, tables, graphs, equations, and verbal descriptions. c. Construct a function in slope-intercept form that models a linear relationship between two quantities. d. Interpret the meaning of the slope and the y-intercept of a linear function in the context of the situation. e. Explore the relationship between linear functions and arithmetic sequences.

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	8.F.5	Apply the concepts of linear and nonlinear functions to graphs in real-world and mathematical situations. a. Analyze and describe attributes of graphs of functions (e.g., constant, increasing/decreasing, linear/nonlinear, maximum/minimum, discrete/continuous). b. Sketch the graph of a function from a verbal description. c. Write a verbal description from the graph of a function with and without scales.
Expressions, Equations, and Inequalities	**The student will:**	
	8.EEI.1	Understand and apply the laws of exponents (i.e. product rule, quotient rule, power to a power, product to a power, quotient to a power, zero power property, negative exponents) to simplify numerical expressions that include integer exponents.
	8.EEI.2	Investigate concepts of square and cube roots. a. Find the exact and approximate solutions to equations of the form $x^2 = p$ and $x^3 = p$ where p is a positive rational number. b. Evaluate square roots of perfect squares. c. Evaluate cube roots of perfect cubes. d. Recognize that square roots of non-perfect squares are irrational.
	8.EEI.3	Explore the relationship between quantities in decimal and scientific notation. a. Express very large and very small quantities in scientific notation in the form $a \times 10^b = p$ where $1 \leq a < 10$ and b is an integer. b. Translate between decimal notation and scientific notation. c. Estimate and compare the relative size of two quantities in scientific notation.
	8.EEI.4	Apply the concepts of decimal and scientific notation to solve real-world and mathematical problems. a. Multiply and divide numbers expressed in both decimal and scientific notation. b. Select appropriate units of measure when representing answers in scientific notation. c. Translate how different technological devices display numbers in scientific notation.
	8.EEI.5	Apply concepts of proportional relationships to real-world and mathematical situations. a. Graph proportional relationships. b. Interpret unit rate as the slope of the graph. c. Compare two different proportional relationships given multiple representations, including tables, graphs, equations, diagrams, and verbal descriptions.
	8.EEI.6	Apply concepts of slope and y-intercept to graphs, equations, and proportional relationships. a. Explain why the slope, m, is the same between any two distinct points on a non-vertical line using similar triangles. b. Derive the slope-intercept form ($y = mx + b$) for a non-vertical line. c. Relate equations for proportional relationships ($y = kx$) with the slope-intercept form ($y = mx + b$) where $b = 0$.

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	8.EEI.7	Extend concepts of linear equations and inequalities in one variable to more complex multi-step equations and inequalities in real-world and mathematical situations. a. Solve linear equations and inequalities with rational number coefficients that include the use of the distributive property, combining like terms, and variables on both sides. b. Recognize the three types of solutions to linear equations: one solution ($x = a$), infinitely many solutions ($a = a$), or no solutions ($a = b$). c. Generate linear equations with the three types of solutions. d. Justify why linear equations have a specific type of solution.
	8.EEI.8	Investigate and solve real-world and mathematical problems involving systems of linear equations in two variables with integer coefficients and solutions. a. Graph systems of linear equations and estimate their point of intersection. b. Understand and verify that a solution to a system of linear equations is represented on a graph as the point of intersection of the two lines. c. Solve systems of linear equations algebraically, including methods of substitution and elimination, or through inspection. d. Understand that systems of linear equations can have one solution, no solution, or infinitely many solutions.
Geometry and Measurement	**The student will:**	
	8.GM.1	Investigate the properties of rigid transformations (rotations, reflections, translations) using a variety of tools (e.g., grid paper, reflective devices, graphing paper, technology). a. Verify that lines are mapped to lines, including parallel lines. b. Verify that corresponding angles are congruent. c. Verify that corresponding line segments are congruent.
	8.GM.2	Apply the properties of rigid transformations (rotations, reflections, translations). a. Rotate geometric figures 90, 180, and 270 degrees, both clockwise and counterclockwise, about the origin. b. Reflect geometric figures with respect to the x-axis and/or y-axis. c. Translate geometric figures vertically and/or horizontally. d. Recognize that two-dimensional figures are only congruent if a series of rigid transformations can be performed to map the pre-image to the image. e. Given two congruent figures, describe the series of rigid transformations that justifies this congruence.
	8.GM.3	Investigate the properties of transformations (rotations, reflections, translations, dilations) using a variety of tools (e.g., grid paper, reflective devices, graphing paper, dynamic software). a. Use coordinate geometry to describe the effect of transformations on two-dimensional figures. b. Relate scale drawings to dilations of geometric figures.

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	8.GM.4	Apply the properties of transformations (rotations, reflections, translations, dilations). a. Dilate geometric figures using scale factors that are positive rational numbers. b. Recognize that two-dimensional figures are only similar if a series of transformations can be performed to map the pre-image to the image. c. Given two similar figures, describe the series of transformations that justifies this similarity. d. Use proportional reasoning to find the missing side lengths of two similar figures.
	8.GM.5	Extend and apply previous knowledge of angles to properties of triangles, similar figures, and parallel lines cut by a transversal. a. Discover that the sum of the three angles in a triangle is 180 degrees. b. Discover and use the relationship between interior and exterior angles of a triangle. c. Identify congruent and supplementary pairs of angles when two parallel lines are cut by a transversal. d. Recognize that two similar figures have congruent corresponding angles.
	8.GM.6	Use models to demonstrate a proof of the Pythagorean Theorem and its converse.
	8.GM.7	Apply the Pythagorean Theorem to model and solve real-world and mathematical problems in two and three dimensions involving right triangles.
	8.GM.8	Find the distance between any two points in the coordinate plane using the Pythagorean Theorem.
	8.GM.9	Solve real-world and mathematical problems involving volumes of cones, cylinders, and spheres and the surface area of cylinders.
Data Analysis, Statistics, and Probability	**The student will:**	
	8.DSP.1	Investigate bivariate data. a. Collect bivariate data. b. Graph the bivariate data on a scatter plot. c. Describe patterns observed on a scatter plot, including clustering, outliers, and association (positive, negative, no correlation, linear, nonlinear).
	8.DSP.2	Draw an approximate line of best fit on a scatter plot that appears to have a linear association and informally assess the fit of the line to the data points.
	8.DSP.3	Apply concepts of an approximate line of best fit in real-world situations. a. Find an approximate equation for the line of best fit using two appropriate data points. b. Interpret the slope and intercept. c. Solve problems using the equation.
	8.DSP.4	Investigate bivariate categorical data in two-way tables. a. Organize bivariate categorical data in a two-way table. b. Interpret data in two-way tables using relative frequencies. c. Explore patterns of possible association between the two categorical variables.
	8.DSP.5	Organize data in matrices with rational numbers and apply to real-world and mathematical situations. a. Understand that a matrix is a way to organize data. b. Recognize that a $m \times n$ matrix has m rows and n columns. c. Add and subtract matrices of the same size. d. Multiply a matrix by a scalar.

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South Carolina College- and Career-Ready Standards for Mathematics
High School Overview

South Carolina College- and Career-Ready Standards for Mathematics includes standards for the high school courses listed below. Each course is divided into Key Concepts that organize the content into broad categories of related standards. The placement of the SCCCR Content Standards for Mathematics into courses establishes a minimum level of consistency and equity for all students and districts in the state. Required course standards within these eight courses affords all stakeholders a clear understanding of learning expectations for each of the courses that districts choose to offer and students choose to take based on their college and career plans. Neither the order of Key Concepts nor the order of individual standards within a Key Concept is intended to prescribe an instructional sequence. The standards should serve as the basis for development of curriculum, instruction, and assessment.

- SCCCR Algebra 1
- SCCCR Foundations in Algebra
- SCCCR Intermediate Algebra
- SCCCR Algebra 2
- SCCCR Geometry
- SCCCR Probability and Statistics
- SCCCR Pre-Calculus
- SCCCR Calculus

Standards denoted by an asterisk (*) are SCCCR Graduation Standards, a subset of the SCCCR Content Standards for Mathematics that specify the mathematics high school students should know and be able to do in order to be both college- and career-ready. All SCCCR-M Graduation Standards are supported and extended by the SCCCR Content Standards for Mathematics. The course sequences students follow in high school should be aligned with their intended career paths that will either lead directly to the workforce or further education in post-secondary institutions. Selected course sequences will provide students with the opportunity to learn all SCCCR-M Graduation Standards as appropriate for their intended career paths.

In each of the SCCCR high school mathematics courses, students build on their earlier work as they expand their mathematical content knowledge and procedural skill through new mathematical experiences. Further, students deepen their mathematical knowledge and gain insight into the relevance of mathematics to other disciplines by applying their content knowledge and procedural skill in a variety of contexts. By expanding and deepening the conceptual understanding of mathematics, these high school courses prepare students for college and career readiness.

Manipulatives and technology are integral to the development of conceptual understanding in all high school mathematics courses. Using a variety of concrete materials and technological tools enables students to explore connections, make conjectures, formulate generalizations, draw conclusions, and discover new mathematical ideas by providing platforms for interacting with multiple representations. Students should use a variety of technologies, such as graphing utilities, spreadsheets, computer algebra systems, dynamic geometry software, and statistical packages, to solve problems and master standards.

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South Carolina College- and Career-Ready Standards for High School

The following is a list of standards organized by conceptual categories that appear in one or more of the South Carolina College- and Career-Ready high school mathematics courses. Standards denoted by an asterisk (*) are SCCCR Graduation Standards as described on page 59. Many of the SCCCR Content Standards for Mathematics are threaded through multiple courses. Parameters for repeated standards are set forth in the related courses as appropriate.

The student will:

Algebra

Arithmetic with Polynomials and Rational Expressions

AAPR.1* Add, subtract, and multiply polynomials and understand that polynomials are closed under these operations.

AAPR.2 Know and apply the Division Theorem and the Remainder Theorem for polynomials.

AAPR.3 Graph polynomials identifying zeros when suitable factorizations are available and indicating end behavior. Write a polynomial function of least degree corresponding to a given graph.

AAPR.4 Prove polynomial identities and use them to describe numerical relationships.

AAPR.5 Apply the Binomial Theorem to expand powers of binomials, including those with one and with two variables. Use the Binomial Theorem to factor squares, cubes, and fourth powers of binomials.

AAPR.6 Apply algebraic techniques to rewrite simple rational expressions in different forms; using inspection, long division, or, for the more complicated examples, a computer algebra system.

AAPR.7 Understand that rational expressions form a system analogous to the rational numbers, closed under addition, subtraction, multiplication, and division by a nonzero rational expression; add, subtract, multiply, and divide rational expressions.

Creating Equations

ACE.1* Create and solve equations and inequalities in one variable that model real-world problems involving linear, quadratic, simple rational, and exponential relationships. Interpret the solutions and determine whether they are reasonable.

ACE.2* Create equations in two or more variables to represent relationships between quantities. Graph the equations on coordinate axes using appropriate labels, units, and scales.

ACE.3 Use systems of equations and inequalities to represent constraints arising in real-world situations. Solve such systems using graphical and analytical methods, including linear programing. Interpret the solution within the context of the situation.

ACE.4* Solve literal equations and formulas for a specified variable including equations and formulas that arise in a variety of disciplines.

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Reasoning with Equations and Inequalities

AREI.1* Understand and justify that the steps taken when solving simple equations in one variable create new equations that have the same solution as the original.

AREI.2* Solve simple rational and radical equations in one variable and understand how extraneous solutions may arise.

AREI.3* Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters.

AREI.4* Solve mathematical and real-world problems involving quadratic equations in one variable. *(Note: AREI.4a and 4b are not Graduation Standards.)*

a. Use the method of completing the square to transform any quadratic equation in x into an equation of the form $(x-h)^2 = k$ that has the same solutions. Derive the quadratic formula from this form.
b. Solve quadratic equations by inspection, taking square roots, completing the square, the quadratic formula and factoring, as appropriate to the initial form of the equation. Recognize when the quadratic formula gives complex solutions and write them as $a + bi$ for real numbers a and b.

AREI.5 Justify that the solution to a system of linear equations is not changed when one of the equations is replaced by a linear combination of the other equation.

AREI.6* Solve systems of linear equations algebraically and graphically focusing on pairs of linear equations in two variables. *(Note: AREI.6a and 6b are not Graduation Standards.)*

a. Solve systems of linear equations using the substitution method.
b. Solve systems of linear equations using linear combination.

AREI.7 Solve a simple system consisting of a linear equation and a quadratic equation in two variables algebraically and graphically. Understand that such systems may have zero, one, two, or infinitely many solutions.

AREI.8 Represent a system of linear equations as a single matrix equation in a vector variable.

AREI.9 Using technology for matrices of dimension 3×3 or greater, find the inverse of a matrix if it exists and use it to solve systems of linear equations.

AREI.10* Explain that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane.

AREI.11* Solve an equation of the form $f(x) = g(x)$ graphically by identifying the x-coordinate(s) of the point(s) of intersection of the graphs of $y = f(x)$ and $y = g(x)$.

AREI.12* Graph the solutions to a linear inequality in two variables.

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Structure and Expressions

ASE.1* Interpret the meanings of coefficients, factors, terms, and expressions based on their real-world contexts. Interpret complicated expressions as being composed of simpler expressions.

ASE.2* Analyze the structure of binomials, trinomials, and other polynomials in order to rewrite equivalent expressions.

ASE.3* Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression. *(Note: ASE.3b and 3c are not Graduation Standards.)*

a. Find the zeros of a quadratic function by rewriting it in equivalent factored form and explain the connection between the zeros of the function, its linear factors, the x-intercepts of its graph, and the solutions to the corresponding quadratic equation.
b. Determine the maximum or minimum value of a quadratic function by completing the square.
c. Use the properties of exponents to transform expressions for exponential functions.

ASE.4 Derive the formula for the sum of a finite geometric series (when the common ratio is not 1), and use the formula to solve problems including applications to finance.

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Functions

Building Functions

FBF.1* Write a function that describes a relationship between two quantities.
(Note: FBF.1a is not a Graduation Standard.)

a. Write a function that models a relationship between two quantities using both explicit expressions and a recursive process and by combining standard forms using addition, subtraction, multiplication and division to build new functions.
b. Combine functions using the operations addition, subtraction, multiplication, and division to build new functions that describe the relationship between two quantities in mathematical and real-world situations.

FBF.2* Write arithmetic and geometric sequences both recursively and with an explicit formula, use them to model situations, and translate between the two forms.

FBF.3* Describe the effect of the transformations $kf(x)$, $f(x)+k$, $f(x+k)$, and combinations of such transformations on the graph of $y=f(x)$ for any real number k. Find the value of k given the graphs and write the equation of a transformed parent function given its graph.

FBF.4 Understand that an inverse function can be obtained by expressing the dependent variable of one function as the independent variable of another, as f and g are inverse functions if and only if $f(x)=y$ and $g(y)=x$, for all values of x in the domain of f and all values of y in the domain of g, and find inverse functions for one-to-one function or by restricting the domain.

a. Use composition to verify one function is an inverse of another.
b. If a function has an inverse, find values of the inverse function from a graph or table.

FBF.5 Understand and verify through function composition that exponential and logarithmic functions are inverses of each other and use this relationship to solve problems involving logarithms and exponents.

Interpreting Functions

FIF.1* Extend previous knowledge of a function to apply to general behavior and features of a function.

a. Understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range.
b. Represent a function using function notation and explain that $f(x)$ denotes the output of function f that corresponds to the input x.
c. Understand that the graph of a function labeled as f is the set of all ordered pairs (x,y) that satisfy the equation $y=f(x)$.

FIF.2* Evaluate functions and interpret the meaning of expressions involving function notation from a mathematical perspective and in terms of the context when the function describes a real-world situation.

FIF.3* Define functions recursively and recognize that sequences are functions, sometimes defined recursively, whose domain is a subset of the integers.

FIF.4* Interpret key features of a function that models the relationship between two quantities when given in graphical or tabular form. Sketch the graph of a function from a verbal description showing key features. Key features include intercepts; intervals where the function is increasing, decreasing, constant, positive, or negative; relative maximums and minimums; symmetries; end behavior and periodicity.

FIF.5* Relate the domain and range of a function to its graph and, where applicable, to the quantitative relationship it describes.

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FIF.6* Given a function in graphical, symbolic, or tabular form, determine the average rate of change of the function over a specified interval. Interpret the meaning of the average rate of change in a given context.

FIF.7* Graph functions from their symbolic representations. Indicate key features including intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior and periodicity. Graph simple cases by hand and use technology for complicated cases. *(Note: FIF.7a – d are not Graduation Standards.)*

a. Graph rational functions, identifying zeros and asymptotes when suitable factorizations are available, and showing end behavior.
b. Graph radical functions over their domain show end behavior.
c. Graph exponential and logarithmic functions, showing intercepts and end behavior.
d. Graph trigonometric functions, showing period, midline, and amplitude.

FIF.8* Translate between different but equivalent forms of a function equation to reveal and explain different properties of the function. *(Note: FIF.8a and 8b are not Graduation Standards.)*

a. Use the process of factoring and completing the square in a quadratic function to show zeros, extreme values, and symmetry of the graph, and interpret these in terms of a context.
b. Interpret expressions for exponential functions by using the properties of exponents.

FIF.9* Compare properties of two functions given in different representations such as algebraic, graphical, tabular, or verbal.

Linear, Quadratic, and Exponential

FLQE.1* Distinguish between situations that can be modeled with linear functions or exponential functions by recognizing situations in which one quantity changes at a constant rate per unit interval as opposed to those in which a quantity changes by a constant percent rate per unit interval. *(Note: A1.FLQE.1a and 1b are not Graduation Standards.)*

a. Prove that linear functions grow by equal differences over equal intervals and that exponential functions grow by equal factors over equal intervals.
b. Recognize situations in which a quantity grows or decays by a constant percent rate per unit interval relative to another.

FLQE.2* Create symbolic representations of linear and exponential functions, including arithmetic and geometric sequences, given graphs, verbal descriptions, and tables.

FLQE.3* Observe using graphs and tables that a quantity increasing exponentially eventually exceeds a quantity increasing linearly, quadratically, or more generally as a polynomial function.

FLQE.4* Express a logarithm as the solution to the exponential equation, $ab^{ct} = d$ where a, c, and d are numbers and the base b is 2, 10, or e; evaluate the logarithm using technology.

FLQE.5* Interpret the parameters in a linear or exponential function in terms of the context.

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Trigonometry

FT.1 Understand that the radian measure of an angle is the length of the arc on the unit circle subtended by the angle.

FT.2 Define sine and cosine as functions of the radian measure of an angle in terms of the x- and y-coordinates of the point on the unit circle corresponding to that angle and explain how these definitions are extensions of the right triangle definitions.

a. Define the tangent, cotangent, secant, and cosecant functions as ratios involving sine and cosine.

b. Write cotangent, secant, and cosecant functions as the reciprocals of tangent, cosine, and sine, respectively.

FT.3 Use special triangles to determine geometrically the values of sine, cosine, tangent for $\frac{\pi}{3}$, $\frac{\pi}{4}$, and $\frac{\pi}{6}$, and use the unit circle to express the values of sine, cosine, and tangent for $\pi - x$, $\pi + x$, and $2\pi - x$ in terms of their values for x, where x is any real number.

FT.4 Use the unit circle to explain symmetry (odd and even) and periodicity of trigonometric functions.

FT.5 Choose trigonometric functions to model periodic phenomena with specified amplitude, frequency, and midline.

FT.6 Define the six inverse trigonometric functions using domain restrictions for regions where the function is always increasing or always decreasing.

FT.7 Use inverse functions to solve trigonometric equations that arise in modeling contexts; evaluate the solutions using technology, and interpret them in terms of the context.

FT.8 Justify the Pythagorean, even/odd, and cofunction identities for sine and cosine using their unit circle definitions and symmetries of the unit circle and use the Pythagorean identity to find $\sin A$, $\cos A$, or $\tan A$, given $\sin A$, $\cos A$, or $\tan A$, and the quadrant of the angle.

FT.9 Justify the sum and difference formulas for sine, cosine, and tangent and use them to solve problems.

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Geometry

Circles

GCI.1 Prove that all circles are similar.

GCI.2* Identify and describe relationships among inscribed angles, radii, and chords; among inscribed angles, central angles, and circumscribed angles; and between radii and tangents to circles. Use those relationships to solve mathematical and real-world problems.

GCI.3 Construct the inscribed and circumscribed circles of a triangle using a variety of tools, including a compass, a straightedge, and dynamic geometry software, and prove properties of angles for a quadrilateral inscribed in a circle.

GCI.4 Construct a tangent line to a circle through a point on the circle, and construct a tangent line from a point outside a given circle to the circle; justify the process used for each construction.

GCI.5* Derive the formulas for the length of an arc and the area of a sector in a circle and apply these formulas to solve mathematical and real-world problems.

Congruence

GCO.1* Define angle, perpendicular line, parallel line, line segment, ray, circle, and skew in terms of the undefined notions of point, line, and plane. Use geometric figures to represent and describe real-world objects.

GCO.2* Represent translations, reflections, rotations, and dilations of objects in the plane by using paper folding, sketches, coordinates, function notation, and dynamic geometry software, and use various representations to help understand the effects of simple transformations and their compositions.

GCO.3* Describe rotations and reflections that carry a regular polygon onto itself and identify types of symmetry of polygons, including line, point, rotational, and self-congruence, and use symmetry to analyze mathematical situations.

GCO.4* Develop definitions of rotations, reflections, and translations in terms of angles, circles, perpendicular lines, parallel lines, and line segments.

GCO.5* Predict and describe the results of transformations on a given figure using geometric terminology from the definitions of the transformations, and describe a sequence of transformations that maps a figure onto its image.

GCO.6* Demonstrate that triangles and quadrilaterals are congruent by identifying a combination of translations, rotations, and reflections in various representations that move one figure onto the other.

GCO.7* Prove two triangles are congruent by applying the Side-Angle-Side, Angle-Side-Angle, Angle-Angle-Side, and Hypotenuse-Leg congruence conditions.

GCO.8* Prove, and apply in mathematical and real-world contexts, theorems about lines and angles, including the following:

a. vertical angles are congruent;
b. when a transversal crosses parallel lines, alternate interior angles are congruent, alternate exterior angles are congruent, and consecutive interior angles are supplementary;
c. any point on a perpendicular bisector of a line segment is equidistant from the endpoints of the segment;
d. perpendicular lines form four right angles.

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GCO.9* Prove, and apply in mathematical and real-world contexts, theorems about the relationships within and among triangles, including the following:

a. measures of interior angles of a triangle sum to 180°;
b. base angles of isosceles triangles are congruent;
c. the segment joining midpoints of two sides of a triangle is parallel to the third side and half the length;
d. the medians of a triangle meet at a point.

GCO.10* Prove, and apply in mathematical and real-world contexts, theorems about parallelograms, including the following:

a. opposite sides of a parallelogram are congruent;
b. opposite angles of a parallelogram are congruent;
c. diagonals of a parallelogram bisect each other;
d. rectangles are parallelograms with congruent diagonals;
e. a parallelograms is a rhombus if and only if the diagonals are perpendicular.

GCO.11* Construct geometric figures using a variety of tools, including a compass, a straightedge, dynamic geometry software, and paper folding, and use these constructions to make conjectures about geometric relationships.

Geometric Measurement and Dimension

GGMD.1* Explain the derivations of the formulas for the circumference of a circle, area of a circle, and volume of a cylinder, pyramid, and cone. Apply these formulas to solve mathematical and real-world problems.

GGMD.2 Explain the derivation of the formulas for the volume of a sphere and other solid figures using Cavalieri's principle.

GGMD.3* Apply surface area and volume formulas for prisms, cylinders, pyramids, cones, and spheres to solve problems and justify results. Include problems that involve algebraic expressions, composite figures, geometric probability, and real-world applications.

GGMD.4 * Describe the shapes of two-dimensional cross-sections of three-dimensional objects and use those cross-sections to solve mathematical and real-world problems.

Expressing Geometric Properties with Equations

GGPE.1* Understand that the standard equation of a circle is derived from the definition of a circle and the distance formula.

GGPE.2 Use the geometric definition of a parabola to derive its equation given the focus and directrix.

GGPE.3 Use the geometric definition of an ellipse and of a hyperbola to derive the equation of each given the foci and points whose sum or difference of distance from the foci are constant.

GGPE.4* Use coordinates to prove simple geometric theorems algebraically.

GGPE.5* Analyze slopes of lines to determine whether lines are parallel, perpendicular, or neither. Write the equation of a line passing through a given point that is parallel or perpendicular to a given line. Solve geometric and real-world problems involving lines and slope.

GGPE.6 Given two points, find the point on the line segment between the two points that divides the segment into a given ratio.

GGPE.7* Use the distance formula to determine distance and midpoint in a coordinate place, as well as areas of triangles and rectangles, when given coordinates.

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Modeling

GM.1* Use geometric shapes, their measures, and their properties to describe real-world objects.

GM.2 Use geometry concepts and methods to model real-world situations and solve problems using a model.

Similarity, Right Triangles, and Trigonometry

GSRT.1 Understand a dilation takes a line not passing through the center of the dilation to a parallel line, and leaves a line passing through the center unchanged. Verify experimentally the properties of dilations given by a center and a scale factor. Understand the dilation of a line segment is longer or shorter in the ratio given by the scale factor.

GSRT.2* Use the definition of similarity to decide if figures are similar and justify decision. Demonstrate that two figures are similar by identifying a combination of translations, rotations, reflections, and dilations in various representations that move one figure onto the other.

GSRT.3* Prove that two triangles are similar using the Angle-Angle criterion and apply the proportionality of corresponding sides to solve problems and justify results.

GSRT.4* Prove, and apply in mathematical and real-world contexts, theorems involving similarity about triangles, including the following:

a. A line drawn parallel to one side of a triangle divides the other two sides into parts of equal proportion.
b. A line divides two sides of a triangle proportionally, then it is parallel to the third side.
c. The square of the hypotenuse of a right triangle is equal to the sum of squares of the other two sides.

GSRT.5* Use congruence and similarity criteria for triangles to solve problems and to prove relationships in geometric figures.

GSRT.6* Understand how the properties of similar right triangles allow the trigonometric ratios to be defined and determine the sine, cosine, and tangent of an acute angle in a right triangle.

GSRT.7 Explain and use the relationship between the sine and cosine of complementary angles.

GSRT.8* Solve right triangles in applied problems using trigonometric ratios and the Pythagorean Theorem.

GSRT.9 Derive the formula $A = \frac{1}{2}ab\sin C$ for the area of a triangle by drawing an auxiliary line from a vertex perpendicular to the opposite side.

GSRT.10 Prove the Laws of Sines and Cosines and use them to solve problems.

GSRT.11 Use the Law of Sines and the Law of Cosines to solve for unknown measures of sides and angles of triangles that arise in mathematical and real-world problems.

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Number and Quantity

Quantities

NQ.1* Use units of measurement to guide the solution of multi-step tasks. Choose and interpret appropriate labels, units, and scales when constructing graphs and other data displays.

NQ.2* Label and define appropriate quantities in descriptive modeling contexts.

NQ.3* Choose a level of accuracy appropriate to limitations on measurement when reporting quantities in context.

Real Number System

NRNS.1* Rewrite expressions involving simple radicals and rational exponents in different forms.

NRNS.2* Use the definition of the meaning of rational exponents to translate between rational exponent and radical forms.

NRNS.3 Explain why the sum or product of rational numbers is rational; that the sum of a rational number and an irrational number is irrational; and that the product of a nonzero rational number and an irrational number is irrational.

Complex Number System

NCNS.1* Know there is a complex number i such that $i^2 = -1$, and every complex number has the form $a + bi$ with a and b real.

NCNS.2 Use the relation $i^2 = -1$ and the commutative, associative, and distributive properties to add, subtract, and multiply complex numbers.

NCNS.3 Find the conjugate of a complex number in rectangular and polar forms and use conjugates to find moduli and quotients of complex numbers.

NCNS.4 Graph complex numbers on the complex plane in rectangular and polar form and explain why the rectangular and polar forms of a given complex number represent the same number.

NCNS.5 Represent addition, subtraction, multiplication, and conjugation of complex numbers geometrically on the complex plane; use properties of this representation for computation.

NCNS.6 Determine the modulus of a complex number by multiplying by its conjugate and determine the distance between two complex numbers by calculating the modulus of their difference.

NCNS.7* Solve quadratic equations in one variable that have complex solutions.

NCNS.8 Extend polynomial identities to the complex numbers and use DeMoivre's Theorem to calculate a power of a complex number.

NCNS.9 Know the Fundamental Theorem of Algebra and explain why complex roots of polynomials with real coefficients must occur in conjugate pairs.

Vector and Matrix Quantities

NVMQ.1 Recognize vector quantities as having both magnitude and direction. Represent vector quantities by directed line segments, and use appropriate symbols for vectors and their magnitudes.

NVMQ.2 Represent and model with vector quantities. Use the coordinates of an initial point and of a terminal point to find the components of a vector.

NVMQ.3 Represent and model with vector quantities. Solve problems involving velocity and other quantities that can be represented by vectors.

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NVMQ.4 Perform operations on vectors.

a. Add and subtract vectors using components of the vectors and graphically.
b. Given the magnitude and direction of two vectors, determine the magnitude of their sum and of their difference.

NVMQ.5 Multiply a vector by a scalar, representing the multiplication graphically and computing the magnitude of the scalar multiple.

NVMQ.6* Use matrices to represent and manipulate data. *(Note: This Graduation Standard is covered in Grade 8.)*

NVMQ.7 Perform operations with matrices of appropriate dimensions including addition, subtraction, and scalar multiplication.

NVMQ.8 Understand that, unlike multiplication of numbers, matrix multiplication for square matrices is not a commutative operation, but still satisfies the associative and distributive properties.

NVMQ.9 Understand that the zero and identity matrices play a role in matrix addition and multiplication similar to the role of 0 and 1 in the real numbers. The determinant of a square matrix is nonzero if and only if the matrix has a multiplicative inverse.

NVMQ.10 Multiply a vector by a matrix of appropriate dimension to produce another vector. Work with matrices as transformations of vectors.

NVMQ.11 Apply 2×2 matrices as transformations of the plane, and interpret the absolute value of the determinant in terms of area.

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Statistics and Probability

Conditional Probability and Rules of Probability

SPCR.1 Describe events as subsets of a sample space and

a. Use Venn diagrams to represent intersections, unions, and complements.
b. Relate intersections, unions, and complements to the words and, or, and not.
c. Represent sample spaces for compound events using Venn diagrams.

SPCR.2 Use the multiplication rule to calculate probabilities for independent and dependent events. Understand that two events A and B are independent if the probability of A and B occurring together is the product of their probabilities, and use this characterization to determine if they are independent.

SPCR.3 Understand the conditional probability of A given B as P(A and B)/P(B), and interpret independence of A and B as saying that the conditional probability of A given B is the same as the probability of A, and the conditional probability of B given A is the same as the probability of B.

SPCR.4 Construct and interpret two-way frequency tables of data when two categories are associated with each object being classified. Use the two-way table as a sample space to decide if events are independent and to approximate conditional probabilities.

SPCR.5 Recognize and explain the concepts of conditional probability and independence in everyday language and everyday situations.

SPCR.6 Calculate the conditional probability of an event A given event B as the fraction of B's outcomes that also belong to A, and interpret the answer in terms of the model.

SPCR.7 Apply the Addition Rule and the Multiplication Rule to determine probabilities, including conditional probabilities, and interpret the results in terms of the probability model.

SPCR.8 Use permutations and combinations to solve mathematical and real-world problems, including determining probabilities of compound events. Justify the results.

Making Interferences and Justifying Conclusions

SPMJ.1* Understand statistics and sampling distributions as a process for making inferences about population parameters based on a random sample from that population.

SPMJ.2* Distinguish between experimental and theoretical probabilities. Collect data on a chance event and use the relative frequency to estimate the theoretical probability of that event. Determine whether a given probability model is consistent with experimental results.

SPMJ.3 Plan and conduct a survey to answer a statistical question. Recognize how the plan addresses sampling technique, randomization, measurement of experimental error and methods to reduce bias.

SPMJ.4 Use data from a sample survey to estimate a population mean or proportion; develop a margin of error through the use of simulation models for random sampling.

SPMJ.5 Distinguish between experiments and observational studies. Determine which of two or more possible experimental designs will best answer a given research question and justify the choice based on statistical significance.

SPMJ.6 Evaluate claims and conclusions in published reports or articles based on data by analyzing study design and the collection, analysis, and display of the data.

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Interpreting Data

SPID.1*	Select and create an appropriate display, including dot plots, histograms, and box plots, for data that includes all real numbers.
SPID.2*	Use statistics appropriate to the shape of the data distribution to compare center and spread of two or more different data sets that include all real numbers.
SPID.3*	Summarize and represent data from a single data set. Interpret differences in shape, center, and spread in the context of the data set, accounting for possible effects of extreme data points (outliers).
SPID.4	Use the mean and standard deviation of a data set to fit it to a normal distribution and to estimate population percentages. Recognize that there are data sets for which such a procedure is not appropriate. Use calculators, spreadsheets, and tables to estimate areas under the normal curve.
SPID.5*	Analyze bivariate categorical data using two-way tables and identify possible associations between the two categories using marginal, joint, and conditional frequencies.
SPID.6*	Using technology, create scatterplots and analyze those plots to compare the fit of linear, quadratic, or exponential models to a given data set. Select the appropriate model, fit a function to the data set, and use the function to solve problems in the context of the data.
SPID.7*	Create a linear function to graphically model data from a real-world problem and interpret the meaning of the slope and intercept(s) in the context of the given problem.
SPID.8*	Using technology, compute and interpret the correlation coefficient of a linear fit.
SPID.9	Differentiate between correlation and causation when describing the relationship between two variables. Identify potential lurking variables which may explain an association between two variables.
SPID.10	Create residual plots and analyze those plots to compare the fit of linear, quadratic, and exponential models to a given data set. Select the appropriate model and use it for interpolation.

Using Probability to Make Decisions

SPMD.1	Develop the probability distribution for a random variable defined for a sample space in which a theoretical probability can be calculated and graph the distribution.
SPMD.2	Calculate the expected value of a random variable as the mean of its probability distribution. Find expected values by assigning probabilities to payoff values. Use expected values to evaluate and compare strategies in real-world scenarios.
SPMD.3	Construct and compare theoretical and experimental probability distributions and use those distributions to find expected values.
SPMD.4*	Use probability to evaluate outcomes of decisions by finding expected values and determine if decisions are fair.
SPMD.5*	Use probability to evaluate outcomes of decisions. Use probabilities to make fair decisions.
SPMD.6*	Analyze decisions and strategies using probability concepts.

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Calculus

Limits and Continuity

LC.1 Understand the concept of a limit graphically, numerically, analytically, and contextually.

a. Estimate and verify limits using tables, graphs of functions, and technology.
b. Calculate limits, including one-sided limits, algebraically using direct substitution, simplification, rationalization, and the limit laws for constant multiples, sums, differences, products, and quotients.
c. Calculate infinite limits and limits at infinity. Understand that infinite limits and limits at infinity provide information regarding the asymptotes of certain functions, including rational, exponential and logarithmic functions.

LC.2 Understand the definition and graphical interpretation of continuity of a function.

a. Apply the definition of continuity of a function at a point to solve problems.
b. Classify discontinuities as removable, jump, or infinite. Justify that classification using the definition of continuity.
c. Understand the Intermediate Value Theorem and apply the theorem to prove the existence of solutions of equations arising in mathematical and real-world problems.

Derivatives

D.1 Understand the concept of the derivative of a function geometrically, numerically, analytically, and verbally.

a. Interpret the value of the derivative of a function as the slope of the corresponding tangent line.
b. Interpret the value of the derivative as an instantaneous rate of change in a variety of real-world contexts such as velocity and population growth.
c. Approximate the derivative graphically by finding the slope of the tangent line drawn to a curve at a given point and numerically by using the difference quotient.
d. Understand and explain graphically and analytically the relationship between differentiability and continuity.
e. Explain graphically and analytically the relationship between the average rate of change and the instantaneous rate of change.
f. Understand the definition of the derivative and use this definition to determine the derivatives of various functions.

D.2 Apply the rules of differentiation to functions.

a. Know and apply the derivatives of constant, power, trigonometric, inverse trigonometric, exponential, and logarithmic functions.
b. Use the constant multiple, sum, difference, product, quotient, and chain rules to find the derivatives of functions.
c. Understand and apply the methods of implicit and logarithmic differentiation.

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D.3 Apply theorems and rules of differentiation to solve mathematical and real-world problems.

a. Explain geometrically and verbally the mathematical and real-world meanings of the Extreme Value Theorem and the Mean Value Theorem.
b. Write an equation of a line tangent to the graph of a function at a point.
c. Explain the relationship between the increasing/decreasing behavior of f and the signs of f'. Use the relationship to generate a graph of f given the graph of f', and vice versa, and to identify relative and absolute extrema of f.
d. Explain the relationships among the concavity of the graph of f, the increasing/decreasing behavior of f' and the signs of f''. Use those relationships to generate graphs of f, f', and f'' given any one of them and identify the points of inflection of f.
e. Solve a variety of real-world problems involving related rates, optimization, linear approximation, and rates of change.

Integrals

C.I.1 Understand the concept of the integral of a function geometrically, numerically, analytically, and contextually.

a. Explain how the definite integral is used to solve area problems.
b. Approximate definite integrals by calculating Riemann sums using left, right, and mid-point evaluations, and using trapezoidal sums.
c. Interpret the definite integral as a limit of Riemann sums.
d. Explain the relationship between the integral and derivative as expressed in both parts of the Fundamental Theorem of Calculus. Interpret the relationship in terms of rates of change.

C.I.2 Apply theorems and rules of integration to solve mathematical and real-world problems.

a. Apply the Fundamental Theorems of Calculus to solve mathematical and real-world problems.
b. Explain graphically and verbally the properties of the definite integral. Apply these properties to evaluate basic definite integrals.
c. Evaluate integrals using substitution.

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South Carolina College- and Career-Ready (SCCCR) Algebra 1 Overview

South Carolina College- and Career-Ready (SCCCR) Algebra 1 is designed to provide students with knowledge and skills to solve problems using simple algebraic tools critically important for college and careers. In SCCCR Algebra 1, students build on the conceptual knowledge and skills they mastered in earlier grades in areas such as algebraic thinking, data analysis, and proportional reasoning.

In this course, students are expected to apply mathematics in meaningful ways to solve problems that arise in the workplace, society, and everyday life through the process of modeling. Mathematical modeling involves creating appropriate equations, graphs, functions, or other mathematical representations to analyze real-world situations and answer questions. Use of technological tools, such as hand-held graphing calculators, is important in creating and analyzing mathematical representations used in the modeling process and should be used during instruction and assessment. However, technology should not be limited to hand-held graphing calculators. Students should use a variety of technologies, such as graphing utilities, spreadsheets, and computer algebra systems, to solve problems and to master standards in all Key Concepts of this course.

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South Carolina College- and Career-Ready (SCCCR) Algebra 1

South Carolina College- and Career-Ready
Mathematical Process Standards

The South Carolina College- and Career-Ready (SCCCR) Mathematical Process Standards demonstrate the ways in which students develop conceptual understanding of mathematical content and apply mathematical skills. As a result, the SCCCR Mathematical Process Standards should be integrated within the SCCCR Content Standards for Mathematics for each grade level and course. Since the process standards drive the pedagogical component of teaching and serve as the means by which students should demonstrate understanding of the content standards, the process standards must be incorporated as an integral part of overall student expectations when assessing content understanding.

Students who are college- and career-ready take a productive and confident approach to mathematics. They are able to recognize that mathematics is achievable, sensible, useful, doable, and worthwhile. They also perceive themselves as effective learners and practitioners of mathematics and understand that a consistent effort in learning mathematics is beneficial.

The Program for International Student Assessment defines mathematical literacy as "an individual's capacity to formulate, employ, and interpret mathematics in a variety of contexts. It includes reasoning mathematically and using mathematical concepts, procedures, facts, and tools to describe, explain, and predict phenomena. It assists individuals to recognize the role that mathematics plays in the world and to make the well-founded judgments and decisions needed by constructive, engaged and reflective citizens" (Organization for Economic Cooperation and Development, 2012).

A mathematically literate student can:

1. **Make sense of problems and persevere in solving them.**
    a. Relate a problem to prior knowledge.
    b. Recognize there may be multiple entry points to a problem and more than one path to a solution.
    c. Analyze what is given, what is not given, what is being asked, and what strategies are needed, and make an initial attempt to solve a problem.
    d. Evaluate the success of an approach to solve a problem and refine it if necessary.

2. **Reason both contextually and abstractly.**
    a. Make sense of quantities and their relationships in mathematical and real-world situations.
    b. Describe a given situation using multiple mathematical representations.
    c. Translate among multiple mathematical representations and compare the meanings each representation conveys about the situation.
    d. Connect the meaning of mathematical operations to the context of a given situation.

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3. **Use critical thinking skills to justify mathematical reasoning and critique the reasoning of others.**
    a. Construct and justify a solution to a problem.
    b. Compare and discuss the validity of various reasoning strategies.
    c. Make conjectures and explore their validity.
    d. Reflect on and provide thoughtful responses to the reasoning of others.

4. **Connect mathematical ideas and real-world situations through modeling.**
    a. Identify relevant quantities and develop a model to describe their relationships.
    b. Interpret mathematical models in the context of the situation.
    c. Make assumptions and estimates to simplify complicated situations.
    d. Evaluate the reasonableness of a model and refine if necessary.

5. **Use a variety of mathematical tools effectively and strategically.**
    a. Select and use appropriate tools when solving a mathematical problem.
    b. Use technological tools and other external mathematical resources to explore and deepen understanding of concepts.

6. **Communicate mathematically and approach mathematical situations with precision.**
    a. Express numerical answers with the degree of precision appropriate for the context of a situation.
    b. Represent numbers in an appropriate form according to the context of the situation.
    c. Use appropriate and precise mathematical language.
    d. Use appropriate units, scales, and labels.

7. **Identify and utilize structure and patterns.**
    a. Recognize complex mathematical objects as being composed of more than one simple object.
    b. Recognize mathematical repetition in order to make generalizations.
    c. Look for structures to interpret meaning and develop solution strategies.

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South Carolina College- and Career-Ready (SCCCR) Algebra 1

Key Concepts	Standards	
Arithmetic with Polynomials and Rational Expressions	**The student will:**	
	A1.AAPR.1*	Add, subtract, and multiply polynomials and understand that polynomials are closed under these operations. (Limit to linear; quadratic.)
Creating Equations	**The student will:**	
	A1.ACE.1*	Create and solve equations and inequalities in one variable that model real-world problems involving linear, quadratic, simple rational, and exponential relationships. Interpret the solutions and determine whether they are reasonable. (Limit to linear; quadratic; exponential with integer exponents.)
	A1.ACE.2*	Create equations in two or more variables to represent relationships between quantities. Graph the equations on coordinate axes using appropriate labels, units, and scales. (Limit to linear; quadratic; exponential with integer exponents; direct and indirect variation.)
	A1.ACE.4*	Solve literal equations and formulas for a specified variable including equations and formulas that arise in a variety of disciplines.
Reasoning with Equations and Inequalities	**The student will:**	
	A1.AREI.1*	Understand and justify that the steps taken when solving simple equations in one variable create new equations that have the same solution as the original.
	A1.AREI.3*	Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters.
	A1.AREI.4*	Solve mathematical and real-world problems involving quadratic equations in one variable. *(Note: A1.AREI.4a and 4b are not Graduation Standards.)* a. Use the method of completing the square to transform any quadratic equation in x into an equation of the form $(x-h)^2 = k$ that has the same solutions. Derive the quadratic formula from this form. b. Solve quadratic equations by inspection, taking square roots, completing the square, the quadratic formula and factoring, as appropriate to the initial form of the equation. Recognize when the quadratic formula gives complex solutions and write them as $a + bi$ for real numbers a and b. (Limit to non-complex roots.)
	A1.AREI.5	Justify that the solution to a system of linear equations is not changed when one of the equations is replaced by a linear combination of the other equation.

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	A1.AREI.6*	Solve systems of linear equations algebraically and graphically focusing on pairs of linear equations in two variables. *(Note: A1.AREI.6a and 6b are not Graduation Standards.)* a. Solve systems of linear equations using the substitution method. b. Solve systems of linear equations using linear combination.
	A1.AREI.10*	Explain that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane.
	A1.AREI.11*	Solve an equation of the form $f(x) = g(x)$ graphically by identifying the x-coordinate(s) of the point(s) of intersection of the graphs of $y = f(x)$ and $y = g(x)$. (Limit to linear; quadratic; exponential.)
	A1.AREI.12*	Graph the solutions to a linear inequality in two variables.
Structure and Expressions	**The student will:**	
	A1.ASE.1*	Interpret the meanings of coefficients, factors, terms, and expressions based on their real-world contexts. Interpret complicated expressions as being composed of simpler expressions. (Limit to linear; quadratic; exponential.)
	A1.ASE.2*	Analyze the structure of binomials, trinomials, and other polynomials in order to rewrite equivalent expressions.
	A1.ASE.3*	Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression. a. Find the zeros of a quadratic function by rewriting it in equivalent factored form and explain the connection between the zeros of the function, its linear factors, the x-intercepts of its graph, and the solutions to the corresponding quadratic equation.
Building Functions	**The student will:**	
	A1.FBF.3*	Describe the effect of the transformations $kf(x)$, $f(x) + k$, $f(x + k)$, and combinations of such transformations on the graph of $y = f(x)$ for any real number k. Find the value of k given the graphs and write the equation of a transformed parent function given its graph. (Limit to linear; quadratic; exponential with integer exponents; vertical shift and vertical stretch.)
Interpreting Function	**The student will:**	
	A1.FIF.1*	Extend previous knowledge of a function to apply to general behavior and features of a function. a. Understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range. b. Represent a function using function notation and explain that $f(x)$ denotes the output of function f that corresponds to the input x. c. Understand that the graph of a function labeled as f is the set of all ordered pairs (x, y) that satisfy the equation $y = f(x)$.
	A1.FIF.2*	Evaluate functions and interpret the meaning of expressions involving function notation from a mathematical perspective and in terms of the context when the function describes a real-world situation.

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	A1.FIF.4*	Interpret key features of a function that models the relationship between two quantities when given in graphical or tabular form. Sketch the graph of a function from a verbal description showing key features. Key features include intercepts; intervals where the function is increasing, decreasing, constant, positive, or negative; relative maximums and minimums; symmetries; end behavior and periodicity. (Limit to linear; quadratic; exponential.)
	A1.FIF.5*	Relate the domain and range of a function to its graph and, where applicable, to the quantitative relationship it describes. (Limit to linear; quadratic; exponential.)
	A1.FIF.6*	Given a function in graphical, symbolic, or tabular form, determine the average rate of change of the function over a specified interval. Interpret the meaning of the average rate of change in a given context. (Limit to linear; quadratic; exponential.)
	A1.FIF.7*	Graph functions from their symbolic representations. Indicate key features including intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior and periodicity. Graph simple cases by hand and use technology for complicated cases. (Limit to linear; quadratic; exponential only in the form $y = a^x + k$.)
	A1.FIF.8*	Translate between different but equivalent forms of a function equation to reveal and explain different properties of the function. (Limit to linear; quadratic; exponential.) *(Note: A1.FIF.8a is not a Graduation Standard.)* a. Use the process of factoring and completing the square in a quadratic function to show zeros, extreme values, and symmetry of the graph, and interpret these in terms of a context.
	A1.FIF.9*	Compare properties of two functions given in different representations such as algebraic, graphical, tabular, or verbal. (Limit to linear; quadratic; exponential.)
Linear, Quadratic, and Exponential	**The student will:**	
	A1.FLQE.1*	Distinguish between situations that can be modeled with linear functions or exponential functions by recognizing situations in which one quantity changes at a constant rate per unit interval as opposed to those in which a quantity changes by a constant percent rate per unit interval. *(Note: A1.FLQE.1a is not a Graduation Standard.)* a. Prove that linear functions grow by equal differences over equal intervals and that exponential functions grow by equal factors over equal intervals.
	A1.FLQE.2*	Create symbolic representations of linear and exponential functions, including arithmetic and geometric sequences, given graphs, verbal descriptions, and tables. (Limit to linear; exponential.)
	A1.FLQE.3*	Observe using graphs and tables that a quantity increasing exponentially eventually exceeds a quantity increasing linearly, quadratically, or more generally as a polynomial function.
	A1.FLQE.5*	Interpret the parameters in a linear or exponential function in terms of the context. (Limit to linear.)

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Quantities	**The student will:**	
	A1.NQ.1*	Use units of measurement to guide the solution of multi-step tasks. Choose and interpret appropriate labels, units, and scales when constructing graphs and other data displays.
	A1.NQ.2*	Label and define appropriate quantities in descriptive modeling contexts.
	A1.NQ.3*	Choose a level of accuracy appropriate to limitations on measurement when reporting quantities in context.
Real Number System	**The student will:**	
	A1.NRNS.1*	Rewrite expressions involving simple radicals and rational exponents in different forms.
	A1.NRNS.2*	Use the definition of the meaning of rational exponents to translate between rational exponent and radical forms.
	A1.NRNS.3	Explain why the sum or product of rational numbers is rational; that the sum of a rational number and an irrational number is irrational; and that the product of a nonzero rational number and an irrational number is irrational.
Interpreting Data	**The student will:**	
	A1.SPID.6*	Using technology, create scatterplots and analyze those plots to compare the fit of linear, quadratic, or exponential models to a given data set. Select the appropriate model, fit a function to the data set, and use the function to solve problems in the context of the data.
	A1.SPID.7*	Create a linear function to graphically model data from a real-world problem and interpret the meaning of the slope and intercept(s) in the context of the given problem.
	A1.SPID.8*	Using technology, compute and interpret the correlation coefficient of a linear fit.

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South Carolina College- and Career-Ready (SCCCR) Foundations in Algebra Overview

Algebra 1 is the backbone of high school mathematics and prepares students for success in all subsequent mathematics courses. Therefore, it is crucial that all students are successful in Algebra 1. As a result, one pathway offered to South Carolina students includes a two-course integrated sequence that should be offered to students who may need additional support in order to be successful in Algebra 1. South Carolina College- and Career-Ready (SCCCR) Foundations in Algebra is the first course in this two-course integrated sequence designed to prepare students for college and career readiness by providing a foundation in algebra, probability, and statistics.

This course builds on the conceptual knowledge and skills students mastered in earlier grades in areas such as algebraic thinking, probability, data analysis, and proportional reasoning. Students who complete this two-course integrated sequence will be given the opportunity to master several standards from SCCCR Algebra 2 and SCCCR Probability and Statistics in addition to all of the standards from SCCCR Algebra 1.

In this course, students are expected to apply mathematics in meaningful ways to solve problems that arise in the workplace, society, and everyday life through the process of modeling. Mathematical modeling involves creating appropriate equations, graphs, functions, or other mathematical representations to analyze real-world situations and answer questions. Use of technological tools, such as hand-held graphing calculators, is important in creating and analyzing mathematical representations used in the modeling process and should be used during instruction and assessment. However, technology should not be limited to hand-held graphing calculators. Students should use a variety of technologies, such as graphing utilities, spreadsheets, and computer algebra systems, to solve problems and to master standards in all Key Concepts of this course.

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South Carolina College- and Career-Ready (SCCCR) Foundations in Algebra

South Carolina College- and Career-Ready Mathematical Process Standards

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    b. Recognize there may be multiple entry points to a problem and more than one path to a solution.
    c. Analyze what is given, what is not given, what is being asked, and what strategies are needed, and make an initial attempt to solve a problem.
    d. Evaluate the success of an approach to solve a problem and refine it if necessary.

2. **Reason both contextually and abstractly.**
    a. Make sense of quantities and their relationships in mathematical and real-world situations.
    b. Describe a given situation using multiple mathematical representations.
    c. Translate among multiple mathematical representations and compare the meanings each representation conveys about the situation.
    d. Connect the meaning of mathematical operations to the context of a given situation.

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3. **Use critical thinking skills to justify mathematical reasoning and critique the reasoning of others.**
    a. Construct and justify a solution to a problem.
    b. Compare and discuss the validity of various reasoning strategies.
    c. Make conjectures and explore their validity.
    d. Reflect on and provide thoughtful responses to the reasoning of others.

4. **Connect mathematical ideas and real-world situations through modeling.**
    a. Identify relevant quantities and develop a model to describe their relationships.
    b. Interpret mathematical models in the context of the situation.
    c. Make assumptions and estimates to simplify complicated situations.
    d. Evaluate the reasonableness of a model and refine if necessary.

5. **Use a variety of mathematical tools effectively and strategically.**
    a. Select and use appropriate tools when solving a mathematical problem.
    b. Use technological tools and other external mathematical resources to explore and deepen understanding of concepts.

6. **Communicate mathematically and approach mathematical situations with precision.**
    a. Express numerical answers with the degree of precision appropriate for the context of a situation.
    b. Represent numbers in an appropriate form according to the context of the situation.
    c. Use appropriate and precise mathematical language.
    d. Use appropriate units, scales, and labels.

7. **Identify and utilize structure and patterns.**
    a. Recognize complex mathematical objects as being composed of more than one simple object.
    b. Recognize mathematical repetition in order to make generalizations.
    c. Look for structures to interpret meaning and develop solution strategies.

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South Carolina College- and Career-Ready (SCCCR) Foundations in Algebra

Key Concepts	Standards	
Creating Equations	**The student will:**	
	FA.ACE.1*	Create and solve equations and inequalities in one variable that model real-world problems involving linear, quadratic, simple rational, and exponential relationships. Interpret the solutions and determine whether they are reasonable. (Limit to linear; quadratic; exponential with integer exponents.)
	FA.ACE.2*	Create equations in two or more variables to represent relationships between quantities. Graph the equations on coordinate axes using appropriate labels, units, and scales. (Limit to linear; quadratic; exponential with integer exponents; direct and indirect variation.)
	FA.ACE.4*	Solve literal equations and formulas for a specified variable including equations and formulas that arise in a variety of disciplines.
Reasoning with Equations and Inequalities	**The student will:**	
	FA.AREI.1*	Understand and justify that the steps taken when solving simple equations in one variable create new equations that have the same solution as the original.
	FA.AREI.3*	Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters.
	FA.AREI.5	Justify that the solution to a system of linear equations is not changed when one of the equations is replaced by a linear combination of the other equation.
	FA.AREI.6*	Solve systems of linear equations algebraically and graphically focusing on pairs of linear equations in two variables. *(Note: FA.AREI.6a and 6b are not Graduation Standards.)* a. Solve systems of linear equations using the substitution method. b. Solve systems of linear equations using linear combination.
	FA.AREI.10*	Explain that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane.
	FA.AREI.11*	Solve an equation of the form $f(x) = g(x)$ graphically by identifying the x-coordinate(s) of the point(s) of intersection of the graphs of $y = f(x)$ and $y = g(x)$. (Limit to linear; quadratic; exponential.)
	FA.AREI.12*	Graph the solutions to a linear inequality in two variables.
Structure and Expressions	**The student will:**	
	FA.ASE.1*	Interpret the meanings of coefficients, factors, terms, and expressions based on their real-world contexts. Interpret complicated expressions as being composed of simpler expressions. (Limit to linear; quadratic; exponential.)

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Building Functions	**The student will:**	
	FA.FBF.3*	Describe the effect of the transformations $kf(x)$, $f(x)+k$, $f(x+k)$, and combinations of such transformations on the graph of $y=f(x)$ for any real number k. Find the value of k given the graphs and write the equation of a transformed parent function given its graph. (Limit to linear; quadratic; exponential with integer exponents; vertical shift and vertical stretch.)
Interpreting Function	**The student will:**	
	FA.FIF.1*	Extend previous knowledge of a function to apply to general behavior and features of a function. a. Understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range. b. Represent a function using function notation and explain that $f(x)$ denotes the output of function f that corresponds to the input x. c. Understand that the graph of a function labeled as f is the set of all ordered pairs (x, y) that satisfy the equation $y=f(x)$.
	FA.FIF.2*	Evaluate functions and interpret the meaning of expressions involving function notation from a mathematical perspective and in terms of the context when the function describes a real-world situation.
	FA.FIF.4*	Interpret key features of a function that models the relationship between two quantities when given in graphical or tabular form. Sketch the graph of a function from a verbal description showing key features. Key features include intercepts; intervals where the function is increasing, decreasing, constant, positive, or negative; relative maximums and minimums; symmetries; end behavior and periodicity. (Limit to linear; quadratic; exponential.)
	FA.FIF.5*	Relate the domain and range of a function to its graph and, where applicable, to the quantitative relationship it describes. (Limit to linear; quadratic; exponential.)
	FA.FIF.7*	Graph functions from their symbolic representations. Indicate key features including intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior and periodicity. Graph simple cases by hand and use technology for complicated cases. (Limit to linear; quadratic; exponential only in the form $y=a^x+k$.)
	FA.FIF.8*	Translate between different but equivalent forms of a function equation to reveal and explain different properties of the function. (Limit to linear; quadratic; exponential.) *(Note: FA.FIF.8a is not a Graduation Standard.)* a. Use the process of factoring and completing the square in a quadratic function to show zeros, extreme values, and symmetry of the graph, and interpret these in terms of a context.
	FA.FIF.9*	Compare properties of two functions given in different representations such as algebraic, graphical, tabular, or verbal. (Limit to linear; quadratic; exponential.)

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Linear, Quadratic, and Exponential	**The student will:**	
	FA.FLQE.1*	Distinguish between situations that can be modeled with linear functions or exponential functions by recognizing situations in which one quantity changes at a constant rate per unit interval as opposed to those in which a quantity changes by a constant percent rate per unit interval. *(Note: FA.FLQE.1a is not a Graduation Standard.)* a. Prove that linear functions grow by equal differences over equal intervals and that exponential functions grow by equal factors over equal intervals.
	FA.FLQE.3*	Observe using graphs and tables that a quantity increasing exponentially eventually exceeds a quantity increasing linearly, quadratically, or more generally as a polynomial function.
	FA.FLQE.5*	Interpret the parameters in a linear or exponential function in terms of the context. (Limit to linear.)
Quantities	**The student will:**	
	FA.NQ.1*	Use units of measurement to guide the solution of multi-step tasks. Choose and interpret appropriate labels, units, and scales when constructing graphs and other data displays.
	FA.NQ.2*	Label and define appropriate quantities in descriptive modeling contexts.
	FA.NQ.3*	Choose a level of accuracy appropriate to limitations on measurement when reporting quantities in context.
Real Number System	**The student will:**	
	FA.NRNS.1*	Rewrite expressions involving simple radicals and rational exponents in different forms.
	FA.NRNS.2*	Use the definition of the meaning of rational exponents to translate between rational exponent and radical forms.
	FA.NRNS.3	Explain why the sum or product of rational numbers is rational; that the sum of a rational number and an irrational number is irrational; and that the product of a nonzero rational number and an irrational number is irrational.
Interpreting Data	**The student will:**	
	FA.SPID.5*	Analyze bivariate categorical data using two-way tables and identify possible associations between the two categories using marginal, joint, and conditional frequencies.
	FA.SPID.6*	Using technology, create scatterplots and analyze those plots to compare the fit of linear, quadratic, or exponential models to a given data set. Select the appropriate model, fit a function to the data set, and use the function to solve problems in the context of the data.
	FA.SPID.7*	Create a linear function to graphically model data from a real-world problem and interpret the meaning of the slope and intercept(s) in the context of the given problem.
	FA.SPID.8*	Using technology, compute and interpret the correlation coefficient of a linear fit.

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Making Inferences and Justifying Conclusions	**The student will:**	
	FA.SPMJ.1*	Understand statistics and sampling distributions as a process for making inferences about population parameters based on a random sample from that population.
	FA.SPMJ.2*	Distinguish between experimental and theoretical probabilities. Collect data on a chance event and use the relative frequency to estimate the theoretical probability of that event. Determine whether a given probability model is consistent with experimental results.
Using Probability to Make Decisions	**The student will:**	
	FA.SPMD.4*	Use probability to evaluate outcomes of decisions by finding expected values and determine if decisions are fair.
	FA.SPMD.5*	Use probability to evaluate outcomes of decisions. Use probabilities to make fair decisions.
	FA.SPMD.6*	Analyze decisions and strategies using probability concepts.

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South Carolina College- and Career-Ready (SCCCR)
Intermediate Algebra Overview

Algebra 1 is the backbone of high school mathematics and prepares students for success in all subsequent mathematics courses. Therefore, it is crucial that all students are successful in Algebra 1. As a result, one pathway offered to South Carolina students includes a two-course integrated sequence that should be offered to students who may need additional support in order to be successful in Algebra 1. South Carolina College- and Career-Ready (SCCCR) Intermediate Algebra is the second course in this two-course integrated sequence designed to prepare students for college and career readiness by providing a foundation in algebra, probability, and statistics.

This course builds on the conceptual knowledge and skills students mastered in SCCCR Foundations in Algebra and in earlier grades in areas such as algebraic thinking, statistics, data analysis, and proportional reasoning. Students who complete this two-course integrated sequence will be given the opportunity to master several standards from SCCCR Algebra 2 and SCCCR Probability and Statistics in addition to all of the standards from SCCCR Algebra 1.

In this course, students are expected to apply mathematics in meaningful ways to solve problems that arise in the workplace, society, and everyday life through the process of modeling. Mathematical modeling involves creating appropriate equations, graphs, functions, or other mathematical representations to analyze real-world situations and answer questions. Use of technological tools, such as hand-held graphing calculators, is important in creating and analyzing mathematical representations used in the modeling process and should be used during instruction and assessment. However, technology should not be limited to hand-held graphing calculators. Students should use a variety of technologies, such as graphing utilities, spreadsheets, statistical software, and computer algebra systems, to solve problems and to master standards in all Key Concepts of this course.

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South Carolina College- and Career-Ready (SCCCR) Intermediate Algebra

South Carolina College- and Career-Ready Mathematical Process Standards

The South Carolina College- and Career-Ready (SCCCR) Mathematical Process Standards demonstrate the ways in which students develop conceptual understanding of mathematical content and apply mathematical skills. As a result, the SCCCR Mathematical Process Standards should be integrated within the SCCCR Content Standards for Mathematics for each grade level and course. Since the process standards drive the pedagogical component of teaching and serve as the means by which students should demonstrate understanding of the content standards, the process standards must be incorporated as an integral part of overall student expectations when assessing content understanding.

Students who are college- and career-ready take a productive and confident approach to mathematics. They are able to recognize that mathematics is achievable, sensible, useful, doable, and worthwhile. They also perceive themselves as effective learners and practitioners of mathematics and understand that a consistent effort in learning mathematics is beneficial.

The Program for International Student Assessment defines mathematical literacy as "an individual's capacity to formulate, employ, and interpret mathematics in a variety of contexts. It includes reasoning mathematically and using mathematical concepts, procedures, facts, and tools to describe, explain, and predict phenomena. It assists individuals to recognize the role that mathematics plays in the world and to make the well-founded judgments and decisions needed by constructive, engaged and reflective citizens" (Organization for Economic Cooperation and Development, 2012).

A mathematically literate student can:

1. **Make sense of problems and persevere in solving them.**
    a. Relate a problem to prior knowledge.
    b. Recognize there may be multiple entry points to a problem and more than one path to a solution.
    c. Analyze what is given, what is not given, what is being asked, and what strategies are needed, and make an initial attempt to solve a problem.
    d. Evaluate the success of an approach to solve a problem and refine it if necessary.

2. **Reason both contextually and abstractly.**
    a. Make sense of quantities and their relationships in mathematical and real-world situations.
    b. Describe a given situation using multiple mathematical representations.
    c. Translate among multiple mathematical representations and compare the meanings each representation conveys about the situation.
    d. Connect the meaning of mathematical operations to the context of a given situation.

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3. **Use critical thinking skills to justify mathematical reasoning and critique the reasoning of others.**
    a. Construct and justify a solution to a problem.
    b. Compare and discuss the validity of various reasoning strategies.
    c. Make conjectures and explore their validity.
    d. Reflect on and provide thoughtful responses to the reasoning of others.

4. **Connect mathematical ideas and real-world situations through modeling.**
    a. Identify relevant quantities and develop a model to describe their relationships.
    b. Interpret mathematical models in the context of the situation.
    c. Make assumptions and estimates to simplify complicated situations.
    d. Evaluate the reasonableness of a model and refine if necessary.

5. **Use a variety of mathematical tools effectively and strategically.**
    a. Select and use appropriate tools when solving a mathematical problem.
    b. Use technological tools and other external mathematical resources to explore and deepen understanding of concepts.

6. **Communicate mathematically and approach mathematical situations with precision.**
    a. Express numerical answers with the degree of precision appropriate for the context of a situation.
    b. Represent numbers in an appropriate form according to the context of the situation.
    c. Use appropriate and precise mathematical language.
    d. Use appropriate units, scales, and labels.

7. **Identify and utilize structure and patterns.**
    a. Recognize complex mathematical objects as being composed of more than one simple object.
    b. Recognize mathematical repetition in order to make generalizations.
    c. Look for structures to interpret meaning and develop solution strategies.

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South Carolina College- and Career-Ready (SCCCR) Intermediate Algebra

Key Concepts	Standards	
Arithmetic with Polynomials and Rational Expressions	**The student will:**	
	IA.AAPR.1*	Add, subtract, and multiply polynomials and understand that polynomials are closed under these operations.
Creating Equations	**The student will:**	
	IA.ACE.1*	Create and solve equations and inequalities in one variable that model real-world problems involving linear, quadratic, simple rational, and exponential relationships. Interpret the solutions and determine whether they are reasonable.
	IA.ACE.2*	Create equations in two or more variables to represent relationships between quantities. Graph the equations on coordinate axes using appropriate labels, units, and scales.
	IA.ACE.4*	Solve literal equations and formulas for a specified variable including equations and formulas that arise in a variety of disciplines.
Reasoning with Equations and Inequalities	**The student will:**	
	IA.AREI.2*	Solve simple rational and radical equations in one variable and understand how extraneous solutions may arise.
	IA.AREI.4*	Solve mathematical and real-world problems involving quadratic equations in one variable. *(Note: IA.AREI.4a and 4b are not Graduation Standards.)* a. Use the method of completing the square to transform any quadratic equation in x into an equation of the form $(x-h)^2 = k$ that has the same solutions. Derive the quadratic formula from this form. b. Solve quadratic equations by inspection, taking square roots, completing the square, the quadratic formula and factoring, as appropriate to the initial form of the equation. Recognize when the quadratic formula gives complex solutions and write them as $a + bi$ for real numbers a and b.
	IA.AREI.11*	Solve an equation of the form $f(x) = g(x)$ graphically by identifying the x-coordinate(s) of the point(s) of intersection of the graphs of $y = f(x)$ and $y = g(x)$.

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Structure and Expressions	**The student will:**	
	IA.ASE.1*	Interpret the meanings of coefficients, factors, terms, and expressions based on their real-world contexts. Interpret complicated expressions as being composed of simpler expressions.
	IA.ASE.2*	Analyze the structure of binomials, trinomials, and other polynomials in order to rewrite equivalent expressions.
	IA.ASE.3*	Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression. *(Note: IA.ASE.3b is not a Graduation Standard.)* a. Find the zeros of a quadratic function by rewriting it in equivalent factored form and explain the connection between the zeros of the function, its linear factors, the x-intercepts of its graph, and the solutions to the corresponding quadratic equation. b. Determine the maximum or minimum value of a quadratic function by completing the square.
Building Functions	**The student will:**	
	IA.FBF.1*	Write a function that describes a relationship between two quantities. *(Note: IA.FBF.1a is not a Graduation Standard.)* a. Write a function that models a relationship between two quantities using both explicit expressions and a recursive process and by combining standard forms using addition, subtraction, multiplication and division to build new functions. b. Combine functions using the operations addition, subtraction, multiplication, and division to build new functions that describe the relationship between two quantities in mathematical and real-world situations.
	IA.FBF.2*	Write arithmetic and geometric sequences both recursively and with an explicit formula, use them to model situations, and translate between the two forms.
	IA.FBF.3*	Describe the effect of the transformations $kf(x)$, $f(x)+k$, $f(x+k)$, and combinations of such transformations on the graph of $y=f(x)$ for any real number k. Find the value of k given the graphs and write the equation of a transformed parent function given its graph.

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Interpreting Function	**The student will:**	
	IA.FIF.3*	Define functions recursively and recognize that sequences are functions, sometimes defined recursively, whose domain is a subset of the integers.
	IA.FIF.4*	Interpret key features of a function that models the relationship between two quantities when given in graphical or tabular form. Sketch the graph of a function from a verbal description showing key features. Key features include intercepts; intervals where the function is increasing, decreasing, constant, positive, or negative; relative maximums and minimums; symmetries; end behavior and periodicity.
	IA.FIF.5*	Relate the domain and range of a function to its graph and, where applicable, to the quantitative relationship it describes.
	IA.FIF.6*	Given a function in graphical, symbolic, or tabular form, determine the average rate of change of the function over a specified interval. Interpret the meaning of the average rate of change in a given context.
	IA.FIF.7*	Graph functions from their symbolic representations. Indicate key features including intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior and periodicity. Graph simple cases by hand and use technology for complicated cases.
	IA.FIF.8*	Translate between different but equivalent forms of a function equation to reveal and explain different properties of the function. *(Note: IA.FIF.8b is not a Graduation Standard.)* b. Interpret expressions for exponential functions by using the properties of exponents.
	IA.FIF.9*	Compare properties of two functions given in different representations such as algebraic, graphical, tabular, or verbal.
Linear, Quadratic, and Exponential	**The student will:**	
	IA.FLQE.2*	Create symbolic representations of linear and exponential functions, including arithmetic and geometric sequences, given graphs, verbal descriptions, and tables.
	IA.FLQE.5*	Interpret the parameters in a linear or exponential function in terms of the context.
Complex Number System	**The student will:**	
	IA.NCNS.1*	Know there is a complex number i such that $i^2 = -1$, and every complex number has the form $a + bi$ with a and b real.
	IA.NCNS.7*	Solve quadratic equations in one variable that have complex solutions.

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South Carolina College- and Career-Ready (SCCCR) Algebra 2 Overview

In South Carolina College- and Career-Ready (SCCCR) Algebra 2, students extend their study of foundational algebraic concepts, such as linear functions, equations and inequalities, quadratic functions, absolute value functions, and exponential functions, from previous mathematics encounters. Additionally, students study new families of functions that are also essential for subsequent mathematical application and learning.

In this course, students are expected to apply mathematics in meaningful ways to solve problems that arise in the workplace, society, and everyday life through the process of modeling. Mathematical modeling involves creating appropriate equations, graphs, functions, or other mathematical representations to analyze real-world situations and answer questions. Use of technological tools, such as hand-held graphing calculators, is important in creating and analyzing mathematical representations used in the modeling process and should be used during instruction and assessment. However, technology should not be limited to hand-held graphing calculators. Students should use a variety of technologies, such as graphing utilities, spreadsheets, and computer algebra systems, to solve problems and to master standards in all Key Concepts of this course.

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South Carolina College- and Career-Ready (SCCCR) Algebra 2

South Carolina College- and Career-Ready
Mathematical Process Standards

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Students who are college- and career-ready take a productive and confident approach to mathematics. They are able to recognize that mathematics is achievable, sensible, useful, doable, and worthwhile. They also perceive themselves as effective learners and practitioners of mathematics and understand that a consistent effort in learning mathematics is beneficial.

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    a. Relate a problem to prior knowledge.
    b. Recognize there may be multiple entry points to a problem and more than one path to a solution.
    c. Analyze what is given, what is not given, what is being asked, and what strategies are needed, and make an initial attempt to solve a problem.
    d. Evaluate the success of an approach to solve a problem and refine it if necessary.

2. **Reason both contextually and abstractly.**
    a. Make sense of quantities and their relationships in mathematical and real-world situations.
    b. Describe a given situation using multiple mathematical representations.
    c. Translate among multiple mathematical representations and compare the meanings each representation conveys about the situation.
    d. Connect the meaning of mathematical operations to the context of a given situation.

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3. **Use critical thinking skills to justify mathematical reasoning and critique the reasoning of others.**
    a. Construct and justify a solution to a problem.
    b. Compare and discuss the validity of various reasoning strategies.
    c. Make conjectures and explore their validity.
    d. Reflect on and provide thoughtful responses to the reasoning of others.

4. **Connect mathematical ideas and real-world situations through modeling.**
    a. Identify relevant quantities and develop a model to describe their relationships.
    b. Interpret mathematical models in the context of the situation.
    c. Make assumptions and estimates to simplify complicated situations.
    d. Evaluate the reasonableness of a model and refine if necessary.

5. **Use a variety of mathematical tools effectively and strategically.**
    a. Select and use appropriate tools when solving a mathematical problem.
    b. Use technological tools and other external mathematical resources to explore and deepen understanding of concepts.

6. **Communicate mathematically and approach mathematical situations with precision.**
    a. Express numerical answers with the degree of precision appropriate for the context of a situation.
    b. Represent numbers in an appropriate form according to the context of the situation.
    c. Use appropriate and precise mathematical language.
    d. Use appropriate units, scales, and labels.

7. **Identify and utilize structure and patterns.**
    a. Recognize complex mathematical objects as being composed of more than one simple object.
    b. Recognize mathematical repetition in order to make generalizations.
    c. Look for structures to interpret meaning and develop solution strategies.

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South Carolina College- and Career-Ready (SCCCR) Algebra 2

Key Concepts	Standards	
Arithmetic with Polynomials and Rational Expressions	**The student will:**	
	A2.AAPR.1*	Add, subtract, and multiply polynomials and understand that polynomials are closed under these operations.
	A2.AAPR.3	Graph polynomials identifying zeros when suitable factorizations are available and indicating end behavior. Write a polynomial function of least degree corresponding to a given graph. (Limit to polynomials with degrees 3 or less.)
Creating Equations	**The student will:**	
	A2.ACE.1*	Create and solve equations and inequalities in one variable that model real-world problems involving linear, quadratic, simple rational, and exponential relationships. Interpret the solutions and determine whether they are reasonable.
	A2.ACE.2*	Create equations in two or more variables to represent relationships between quantities. Graph the equations on coordinate axes using appropriate labels, units, and scales.
	A2.ACE.3	Use systems of equations and inequalities to represent constraints arising in real-world situations. Solve such systems using graphical and analytical methods, including linear programing. Interpret the solution within the context of the situation. (Limit to linear programming.)
	A2.ACE.4*	Solve literal equations and formulas for a specified variable including equations and formulas that arise in a variety of disciplines.
Reasoning with Equations and Inequalities	**The student will:**	
	A2.AREI.2*	Solve simple rational and radical equations in one variable and understand how extraneous solutions may arise.
	A2.AREI.4*	Solve mathematical and real-world problems involving quadratic equations in one variable. b. Solve quadratic equations by inspection, taking square roots, completing the square, the quadratic formula and factoring, as appropriate to the initial form of the equation. Recognize when the quadratic formula gives complex solutions and write them as $a + bi$ for real numbers a and b. *(Note: A2.AREI.4b is not a Graduation Standard.)*
	A2.AREI.7	Solve a simple system consisting of a linear equation and a quadratic equation in two variables algebraically and graphically. Understand that such systems may have zero, one, two, or infinitely many solutions. (Limit to linear equations and quadratic functions.)
	A2.AREI.11*	Solve an equation of the form $f(x) = g(x)$ graphically by identifying the x-coordinate(s) of the point(s) of intersection of the graphs of $y = f(x)$ and $y = g(x)$.

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Structure and Expressions	**The student will:**	
	A2.ASE.1*	Interpret the meanings of coefficients, factors, terms, and expressions based on their real-world contexts. Interpret complicated expressions as being composed of simpler expressions.
	A2.ASE.2*	Analyze the structure of binomials, trinomials, and other polynomials in order to rewrite equivalent expressions.
	A2.ASE.3*	Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression. *(Note: A2.ASE.3b and 3c are not Graduation Standards.)* b. Determine the maximum or minimum value of a quadratic function by completing the square. c. Use the properties of exponents to transform expressions for exponential functions.
Building Functions	**The student will:**	
	A2.FBF.1*	Write a function that describes a relationship between two quantities. *(Note: IA.FBF.1a is not a Graduation Standard.)* a. Write a function that models a relationship between two quantities using both explicit expressions and a recursive process and by combining standard forms using addition, subtraction, multiplication and division to build new functions. b. Combine functions using the operations addition, subtraction, multiplication, and division to build new functions that describe the relationship between two quantities in mathematical and real-world situations.
	A2.FBF.2*	Write arithmetic and geometric sequences both recursively and with an explicit formula, use them to model situations, and translate between the two forms.
	A2.FBF.3*	Describe the effect of the transformations $kf(x)$, $f(x)+k$, $f(x+k)$, and combinations of such transformations on the graph of $y=f(x)$ for any real number k. Find the value of k given the graphs and write the equation of a transformed parent function given its graph.
Interpreting Functions	**The student will:**	
	A2.FIF.3*	Define functions recursively and recognize that sequences are functions, sometimes defined recursively, whose domain is a subset of the integers.
	A2.FIF.4*	Interpret key features of a function that models the relationship between two quantities when given in graphical or tabular form. Sketch the graph of a function from a verbal description showing key features. Key features include intercepts; intervals where the function is increasing, decreasing, constant, positive, or negative; relative maximums and minimums; symmetries; end behavior and periodicity.
	A2.FIF.5*	Relate the domain and range of a function to its graph and, where applicable, to the quantitative relationship it describes.
	A2.FIF.6*	Given a function in graphical, symbolic, or tabular form, determine the average rate of change of the function over a specified interval. Interpret the meaning of the average rate of change in a given context.

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	A2.FIF.7*	Graph functions from their symbolic representations. Indicate key features including intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior and periodicity. Graph simple cases by hand and use technology for complicated cases.
	A2.FIF.8*	Translate between different but equivalent forms of a function equation to reveal and explain different properties of the function. *(Note: A2.FIF.8b is not a Graduation Standard.)* b. Interpret expressions for exponential functions by using the properties of exponents.
	A2.FIF.9*	Compare properties of two functions given in different representations such as algebraic, graphical, tabular, or verbal.
Linear, Quadratic, and Exponential	**The student will:**	
	A2.FLQE.1*	Distinguish between situations that can be modeled with linear functions or exponential functions by recognizing situations in which one quantity changes at a constant rate per unit interval as opposed to those in which a quantity changes by a constant percent rate per unit interval. *(Note: A2.FLQE.1c is not a Graduation Standard.)* c. Recognize situations in which a quantity grows or decays by a constant percent rate per unit interval relative to another.
	A2.FLQE.2*	Create symbolic representations of linear and exponential functions, including arithmetic and geometric sequences, given graphs, verbal descriptions, and tables.
	A2.FLQE.5*	Interpret the parameters in a linear or exponential function in terms of the context.
Complex Number System	**The student will:**	
	A2.NCNS.1*	Know there is a complex number i such that $i^2 = -1$, and every complex number has the form $a + bi$ with a and b real.
	A2.NCNS.7*	Solve quadratic equations in one variable that have complex solutions.

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South Carolina College- and Career-Ready (SCCCR) Geometry Overview

South Carolina College- and Career-Ready (SCCCR) Geometry provides students with tools to solve problems about objects and shapes in two- and three-dimensions, including theorems about universal truths and spatial reasoning.

In this course, students are expected to apply mathematics in meaningful ways to solve problems that arise in the workplace, society, and everyday life through the process of modeling. Mathematical modeling involves creating appropriate equations, graphs, diagrams, or other mathematical representations to analyze real-world situations and solve problems. Use of mathematical tools is important in creating and analyzing the mathematical representations used in the modeling process. In order to represent and solve problems, students should learn to use a variety of mathematical tools and technologies such as a compass, a straightedge, graph paper, patty paper, graphing utilities, and dynamic geometry software.

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South Carolina College- and Career-Ready (SCCCR) Geometry

South Carolina College- and Career-Ready Mathematical Process Standards

The South Carolina College- and Career-Ready (SCCCR) Mathematical Process Standards demonstrate the ways in which students develop conceptual understanding of mathematical content and apply mathematical skills. As a result, the SCCCR Mathematical Process Standards should be integrated within the SCCCR Content Standards for Mathematics for each grade level and course. Since the process standards drive the pedagogical component of teaching and serve as the means by which students should demonstrate understanding of the content standards, the process standards must be incorporated as an integral part of overall student expectations when assessing content understanding.

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A mathematically literate student can:

1. **Make sense of problems and persevere in solving them.**
    a. Relate a problem to prior knowledge.
    b. Recognize there may be multiple entry points to a problem and more than one path to a solution.
    c. Analyze what is given, what is not given, what is being asked, and what strategies are needed, and make an initial attempt to solve a problem.
    d. Evaluate the success of an approach to solve a problem and refine it if necessary.

2. **Reason both contextually and abstractly.**
    a. Make sense of quantities and their relationships in mathematical and real-world situations.
    b. Describe a given situation using multiple mathematical representations.
    c. Translate among multiple mathematical representations and compare the meanings each representation conveys about the situation.
    d. Connect the meaning of mathematical operations to the context of a given situation.

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3. **Use critical thinking skills to justify mathematical reasoning and critique the reasoning of others.**
    a. Construct and justify a solution to a problem.
    b. Compare and discuss the validity of various reasoning strategies.
    c. Make conjectures and explore their validity.
    d. Reflect on and provide thoughtful responses to the reasoning of others.

4. **Connect mathematical ideas and real-world situations through modeling.**
    a. Identify relevant quantities and develop a model to describe their relationships.
    b. Interpret mathematical models in the context of the situation.
    c. Make assumptions and estimates to simplify complicated situations.
    d. Evaluate the reasonableness of a model and refine if necessary.

5. **Use a variety of mathematical tools effectively and strategically.**
    a. Select and use appropriate tools when solving a mathematical problem.
    b. Use technological tools and other external mathematical resources to explore and deepen understanding of concepts.

6. **Communicate mathematically and approach mathematical situations with precision.**
    a. Express numerical answers with the degree of precision appropriate for the context of a situation.
    b. Represent numbers in an appropriate form according to the context of the situation.
    c. Use appropriate and precise mathematical language.
    d. Use appropriate units, scales, and labels.

7. **Identify and utilize structure and patterns.**
    a. Recognize complex mathematical objects as being composed of more than one simple object.
    b. Recognize mathematical repetition in order to make generalizations.
    c. Look for structures to interpret meaning and develop solution strategies.

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South Carolina College- and Career-Ready (SCCCR) Geometry

Key Concepts	Standards	
Circles	**The student will:**	
	G.GCI.1	Prove that all circles are similar.
	G.GCI.2*	Identify and describe relationships among inscribed angles, radii, and chords; among inscribed angles, central angles, and circumscribed angles; and between radii and tangents to circles. Use those relationships to solve mathematical and real-world problems.
	G.GCI.3	Construct the inscribed and circumscribed circles of a triangle using a variety of tools, including a compass, a straightedge, and dynamic geometry software, and prove properties of angles for a quadrilateral inscribed in a circle.
	G.GCI.4	Construct a tangent line to a circle through a point on the circle, and construct a tangent line from a point outside a given circle to the circle; justify the process used for each construction.
	G.GCI.5*	Derive the formulas for the length of an arc and the area of a sector in a circle and apply these formulas to solve mathematical and real-world problems.
Congruence	**The student will:**	
	G.GCO.1*	Define angle, perpendicular line, parallel line, line segment, ray, circle, and skew in terms of the undefined notions of point, line, and plane. Use geometric figures to represent and describe real-world objects.
	G.GCO.2*	Represent translations, reflections, rotations, and dilations of objects in the plane by using paper folding, sketches, coordinates, function notation, and dynamic geometry software, and use various representations to help understand the effects of simple transformations and their compositions.
	G.GCO.3*	Describe rotations and reflections that carry a regular polygon onto itself and identify types of symmetry of polygons, including line, point, rotational, and self-congruence, and use symmetry to analyze mathematical situations.
	G.GCO.4*	Develop definitions of rotations, reflections, and translations in terms of angles, circles, perpendicular lines, parallel lines, and line segments.
	G.GCO.5*	Predict and describe the results of transformations on a given figure using geometric terminology from the definitions of the transformations, and describe a sequence of transformations that maps a figure onto its image.
	G.GCO.6*	Demonstrate that triangles and quadrilaterals are congruent by identifying a combination of translations, rotations, and reflections in various representations that move one figure onto the other.
	G.GCO.7*	Prove two triangles are congruent by applying the Side-Angle-Side, Angle-Side-Angle, Angle-Angle-Side, and Hypotenuse-Leg congruence conditions.

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	G.GCO.8*	Prove, and apply in mathematical and real-world contexts, theorems about lines and angles, including the following: a. vertical angles are congruent; b. when a transversal crosses parallel lines, alternate interior angles are congruent, alternate exterior angles are congruent, and consecutive interior angles are supplementary; c. any point on a perpendicular bisector of a line segment is equidistant from the endpoints of the segment; d. perpendicular lines form four right angles.
	G.GCO.9*	Prove, and apply in mathematical and real-world contexts, theorems about the relationships within and among triangles, including the following: a. measures of interior angles of a triangle sum to 180°; b. base angles of isosceles triangles are congruent; c. the segment joining midpoints of two sides of a triangle is parallel to the third side and half the length; d. the medians of a triangle meet at a point.
	G.GCO.10*	Prove, and apply in mathematical and real-world contexts, theorems about parallelograms, including the following: a. opposite sides of a parallelogram are congruent; b. opposite angles of a parallelogram are congruent; c. diagonals of a parallelogram bisect each other; d. rectangles are parallelograms with congruent diagonals; e. a parallelograms is a rhombus if and only if the diagonals are perpendicular.
	G.GCO.11*	Construct geometric figures using a variety of tools, including a compass, a straightedge, dynamic geometry software, and paper folding, and use these constructions to make conjectures about geometric relationships.
Geometric Measurement and Dimension	**The student will:**	
	G.GGMD.1*	Explain the derivations of the formulas for the circumference of a circle, area of a circle, and volume of a cylinder, pyramid, and cone. Apply these formulas to solve mathematical and real-world problems.
	G.GGMD.2	Explain the derivation of the formulas for the volume of a sphere and other solid figures using Cavalieri's principle.
	G.GGMD.3*	Apply surface area and volume formulas for prisms, cylinders, pyramids, cones, and spheres to solve problems and justify results. Include problems that involve algebraic expressions, composite figures, geometric probability, and real-world applications.
	G.GGMD.4 *	Describe the shapes of two-dimensional cross-sections of three-dimensional objects and use those cross-sections to solve mathematical and real-world problems.

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Expressing Geometric Properties with Equations	**The student will:**	
	G.GGPE.1*	Understand that the standard equation of a circle is derived from the definition of a circle and the distance formula.
	G.GGPE.4*	Use coordinates to prove simple geometric theorems algebraically.
	G.GGPE.5*	Analyze slopes of lines to determine whether lines are parallel, perpendicular, or neither. Write the equation of a line passing through a given point that is parallel or perpendicular to a given line. Solve geometric and real-world problems involving lines and slope.
	G.GGPE.6	Given two points, find the point on the line segment between the two points that divides the segment into a given ratio.
	G.GGPE.7*	Use the distance formula to determine distance and midpoint in a coordinate place, as well as areas of triangles and rectangles, when given coordinates.
Modeling	**The student will:**	
	G.GM.1*	Use geometric shapes, their measures, and their properties to describe real-world objects.
	G.GM.2	Use geometry concepts and methods to model real-world situations and solve problems using a model.
Similarity, Right Triangles, and Trigonometry	**The student will:**	
	G.GSRT.1	Understand a dilation takes a line not passing through the center of the dilation to a parallel line, and leaves a line passing through the center unchanged. Verify experimentally the properties of dilations given by a center and a scale factor. Understand the dilation of a line segment is longer or shorter in the ratio given by the scale factor.
	G.GSRT.2*	Use the definition of similarity to decide if figures are similar and justify decision. Demonstrate that two figures are similar by identifying a combination of translations, rotations, reflections, and dilations in various representations that move one figure onto the other.
	G.GSRT.3*	Prove that two triangles are similar using the Angle-Angle criterion and apply the proportionality of corresponding sides to solve problems and justify results.
	G.GSRT.4*	Prove, and apply in mathematical and real-world contexts, theorems involving similarity about triangles, including the following: a. A line drawn parallel to one side of a triangle divides the other two sides into parts of equal proportion. b. A line divides two sides of a triangle proportionally, then it is parallel to the third side. c. The square of the hypotenuse of a right triangle is equal to the sum of squares of the other two sides.
	G.GSRT.5*	Use congruence and similarity criteria for triangles to solve problems and to prove relationships in geometric figures.
	G.GSRT.6*	Understand how the properties of similar right triangles allow the trigonometric ratios to be defined and determine the sine, cosine, and tangent of an acute angle in a right triangle.
	G.GSRT.7	Explain and use the relationship between the sine and cosine of complementary angles.

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	G.GSRT.8*	Solve right triangles in applied problems using trigonometric ratios and the Pythagorean Theorem.
Interpreting Data	**The student will:**	
	G.SPID.1*	Select and create an appropriate display, including dot plots, histograms, and box plots, for data that includes all real numbers.
	G.SPID.2*	Use statistics appropriate to the shape of the data distribution to compare center and spread of two or more different data sets that include all real numbers.
	G.SPID.3*	Summarize and represent data from a single data set. Interpret differences in shape, center, and spread in the context of the data set, accounting for possible effects of extreme data points (outliers).

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South Carolina College- and Career-Ready (SCCCR)
Probability and Statistics Overview

South Carolina College- and Career-Ready (SCCCR) Probability and Statistics is designed to prepare students for success in post-secondary careers and statistics courses and in a world where knowledge of data analysis, statistics, and probability is necessary to make informed decisions in areas such as health, economics, and politics. In SCCCR Probability and Statistics, students build on the conceptual knowledge and skills they mastered in previous mathematics courses in areas such as probability, data presentation and analysis, correlation, and regression. This course prepares students for college and career readiness but is not designed to prepare students for an Advanced Placement exam.

In this course, students are expected to apply mathematics in meaningful ways to solve problems that arise in the workplace, society, and everyday life through the process of modeling. Mathematical modeling involves creating appropriate equations, functions, graphs, distributions, or other mathematical representations to analyze real-world situations and answer questions. Use of technological tools, such as hand-held graphing calculators, is important in creating and analyzing mathematical representations used in the modeling process and should be used during instruction and assessment. However, technology should not be limited to hand-held graphing calculators. Students should use a variety of technologies, such as graphing utilities, simulation applications, spreadsheets, and statistical software, to solve problems and to master standards in all Key Concepts of this course.

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South Carolina College- and Career-Ready (SCCCR) Probability and Statistics

South Carolina College- and Career-Ready Mathematical Process Standards

The South Carolina College- and Career-Ready (SCCCR) Mathematical Process Standards demonstrate the ways in which students develop conceptual understanding of mathematical content and apply mathematical skills. As a result, the SCCCR Mathematical Process Standards should be integrated within the SCCCR Content Standards for Mathematics for each grade level and course. Since the process standards drive the pedagogical component of teaching and serve as the means by which students should demonstrate understanding of the content standards, the process standards must be incorporated as an integral part of overall student expectations when assessing content understanding.

Students who are college- and career-ready take a productive and confident approach to mathematics. They are able to recognize that mathematics is achievable, sensible, useful, doable, and worthwhile. They also perceive themselves as effective learners and practitioners of mathematics and understand that a consistent effort in learning mathematics is beneficial.

The Program for International Student Assessment defines mathematical literacy as "an individual's capacity to formulate, employ, and interpret mathematics in a variety of contexts. It includes reasoning mathematically and using mathematical concepts, procedures, facts, and tools to describe, explain, and predict phenomena. It assists individuals to recognize the role that mathematics plays in the world and to make the well-founded judgments and decisions needed by constructive, engaged and reflective citizens" (Organization for Economic Cooperation and Development, 2012).

A mathematically literate student can:

1. **Make sense of problems and persevere in solving them.**
    a. Relate a problem to prior knowledge.
    b. Recognize there may be multiple entry points to a problem and more than one path to a solution.
    c. Analyze what is given, what is not given, what is being asked, and what strategies are needed, and make an initial attempt to solve a problem.
    d. Evaluate the success of an approach to solve a problem and refine it if necessary.

2. **Reason both contextually and abstractly.**
    a. Make sense of quantities and their relationships in mathematical and real-world situations.
    b. Describe a given situation using multiple mathematical representations.
    c. Translate among multiple mathematical representations and compare the meanings each representation conveys about the situation.
    d. Connect the meaning of mathematical operations to the context of a given situation.

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3. **Use critical thinking skills to justify mathematical reasoning and critique the reasoning of others.**
    a. Construct and justify a solution to a problem.
    b. Compare and discuss the validity of various reasoning strategies.
    c. Make conjectures and explore their validity.
    d. Reflect on and provide thoughtful responses to the reasoning of others.

4. **Connect mathematical ideas and real-world situations through modeling.**
    a. Identify relevant quantities and develop a model to describe their relationships.
    b. Interpret mathematical models in the context of the situation.
    c. Make assumptions and estimates to simplify complicated situations.
    d. Evaluate the reasonableness of a model and refine if necessary.

5. **Use a variety of mathematical tools effectively and strategically.**
    a. Select and use appropriate tools when solving a mathematical problem.
    b. Use technological tools and other external mathematical resources to explore and deepen understanding of concepts.

6. **Communicate mathematically and approach mathematical situations with precision.**
    a. Express numerical answers with the degree of precision appropriate for the context of a situation.
    b. Represent numbers in an appropriate form according to the context of the situation.
    c. Use appropriate and precise mathematical language.
    d. Use appropriate units, scales, and labels.

7. **Identify and utilize structure and patterns.**
    a. Recognize complex mathematical objects as being composed of more than one simple object.
    b. Recognize mathematical repetition in order to make generalizations.
    c. Look for structures to interpret meaning and develop solution strategies.

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South Carolina College- and Career-Ready (SCCCR)
Probability and Statistics

Key Concepts	Standards	
Conditional Probability and Rules of Probability	**The student will:**	
	PS.SPCR.1	Describe events as subsets of a sample space and a. Use Venn diagrams to represent intersections, unions, and complements. b. Relate intersections, unions, and complements to the words and, or, and not. c. Represent sample spaces for compound events using Venn diagrams.
	PS.SPCR.2	Use the multiplication rule to calculate probabilities for independent and dependent events. Understand that two events A and B are independent if the probability of A and B occurring together is the product of their probabilities, and use this characterization to determine if they are independent.
	PS.SPCR.3	Understand the conditional probability of A given B as P(A and B)/P(B), and interpret independence of A and B as saying that the conditional probability of A given B is the same as the probability of A, and the conditional probability of B given A is the same as the probability of B.
	PS.SPCR.4	Construct and interpret two-way frequency tables of data when two categories are associated with each object being classified. Use the two-way table as a sample space to decide if events are independent and to approximate conditional probabilities.
	PS.SPCR.5	Recognize and explain the concepts of conditional probability and independence in everyday language and everyday situations.
	PS.SPCR.6	Calculate the conditional probability of an event A given event B as the fraction of B's outcomes that also belong to A, and interpret the answer in terms of the model.
	PS.SPCR.7	Apply the Addition Rule and the Multiplication Rule to determine probabilities, including conditional probabilities, and interpret the results in terms of the probability model.
	PS.SPCR.8	Use permutations and combinations to solve mathematical and real-world problems, including determining probabilities of compound events. Justify the results.
Making Interferences and Justifying Conclusions	**The student will:**	
	PS.SPMJ.1*	Understand statistics and sampling distributions as a process for making inferences about population parameters based on a random sample from that population.
	PS.SPMJ.2*	Distinguish between experimental and theoretical probabilities. Collect data on a chance event and use the relative frequency to estimate the theoretical probability of that event. Determine whether a given probability model is consistent with experimental results.

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	PS.SPMJ.3	Plan and conduct a survey to answer a statistical question. Recognize how the plan addresses sampling technique, randomization, measurement of experimental error and methods to reduce bias.
	PS.SPMJ.4	Use data from a sample survey to estimate a population mean or proportion; develop a margin of error through the use of simulation models for random sampling.
	PS.SPMJ.5	Distinguish between experiments and observational studies. Determine which of two or more possible experimental designs will best answer a given research question and justify the choice based on statistical significance.
	PS.SPMJ.6	Evaluate claims and conclusions in published reports or articles based on data by analyzing study design and the collection, analysis, and display of the data.
Interpreting Data	**The student will:**	
	PS.SPID.1*	Select and create an appropriate display, including dot plots, histograms, and box plots, for data that includes all real numbers.
	PS.SPID.2*	Use statistics appropriate to the shape of the data distribution to compare center and spread of two or more different data sets that include all real numbers.
	PS.SPID.3*	Summarize and represent data from a single data set. Interpret differences in shape, center, and spread in the context of the data set, accounting for possible effects of extreme data points (outliers).
	PS.SPID.4	Use the mean and standard deviation of a data set to fit it to a normal distribution and to estimate population percentages. Recognize that there are data sets for which such a procedure is not appropriate. Use calculators, spreadsheets, and tables to estimate areas under the normal curve.
	PS.SPID.5*	Analyze bivariate categorical data using two-way tables and identify possible associations between the two categories using marginal, joint, and conditional frequencies.
	PS.SPID.6*	Using technology, create scatterplots and analyze those plots to compare the fit of linear, quadratic, or exponential models to a given data set. Select the appropriate model, fit a function to the data set, and use the function to solve problems in the context of the data.
	PS.SPID.7*	Find linear models using median fit and regression methods to make predictions. Interpret the slope and intercept of a linear model in the context of the data.
	PS.SPID.8*	Compute using technology and interpret the correlation coefficient of a linear fit.
	PS.SPID.9	Differentiate between correlation and causation when describing the relationship between two variables. Identify potential lurking variables which may explain an association between two variables.
	PS.SPID.10	Create residual plots and analyze those plots to compare the fit of linear, quadratic, and exponential models to a given data set. Select the appropriate model and use it for interpolation.

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Using Probability to Make Decisions	**The student will:**	
	PS.SPMD.1	Develop the probability distribution for a random variable defined for a sample space in which a theoretical probability can be calculated and graph the distribution.
	PS.SPMD.2	Calculate the expected value of a random variable as the mean of its probability distribution. Find expected values by assigning probabilities to payoff values. Use expected values to evaluate and compare strategies in real-world scenarios.
	PS.SPMD.3	Construct and compare theoretical and experimental probability distributions and use those distributions to find expected values.
	PS.SPMD.4*	Use probability to evaluate outcomes of decisions by finding expected values and determine if decisions are fair.
	PS.SPMD.5*	Use probability to evaluate outcomes of decisions. Use probabilities to make fair decisions.
	PS.SPMD.6*	Analyze decisions and strategies using probability concepts.

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South Carolina College- and Career-Ready (SCCCR) Pre-Calculus Overview

In South Carolina College- and Career-Ready (SCCCR) Pre-Calculus, students build on the conceptual knowledge and skills for mathematics they mastered in previous mathematics courses and construct a foundation necessary for subsequent mathematical study. The standards for those courses provide students with a foundation in the theory of functions, roots and factors of polynomials, exponential and logarithmic functions, the complex number system, and an introduction to trigonometry.

In this course, students are expected to apply mathematics in meaningful ways to solve problems that arise in the workplace, society, and everyday life through the process of modeling. Mathematical modeling involves creating appropriate equations, graphs, functions, or other mathematical representations to analyze real-world situations and answer questions. Use of technological tools, such as hand-held graphing calculators, is important in creating and analyzing mathematical representations used in the modeling process and should be used during instruction and assessment. However, technology should not be limited to hand-held graphing calculators. Students should use a variety of technologies, such as graphing utilities, spreadsheets, and computer algebra systems, to solve problems and to master standards in all Key Concepts of this course.

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South Carolina College- and Career-Ready (SCCCR) Pre-Calculus

South Carolina College- and Career-Ready Mathematical Process Standards

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    d. Evaluate the success of an approach to solve a problem and refine it if necessary.

2. **Reason both contextually and abstractly.**
    a. Make sense of quantities and their relationships in mathematical and real-world situations.
    b. Describe a given situation using multiple mathematical representations.
    c. Translate among multiple mathematical representations and compare the meanings each representation conveys about the situation.
    d. Connect the meaning of mathematical operations to the context of a given situation.

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3. **Use critical thinking skills to justify mathematical reasoning and critique the reasoning of others.**
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South Carolina College- and Career-Ready (SCCCR) Pre-Calculus

Key Concepts	Standards	
Arithmetic with Polynomials and Rational Expressions	**The student will:**	
	PC.AAPR.2	Know and apply the Division Theorem and the Remainder Theorem for polynomials.
	PC.AAPR.3	Graph polynomials identifying zeros when suitable factorizations are available and indicating end behavior. Write a polynomial function of least degree corresponding to a given graph.
	PC.AAPR.4	Prove polynomial identities and use them to describe numerical relationships.
	PC.AAPR.5	Apply the Binomial Theorem to expand powers of binomials, including those with one and with two variables. Use the Binomial Theorem to factor squares, cubes, and fourth powers of binomials.
	PC.AAPR.6	Apply algebraic techniques to rewrite simple rational expressions in different forms; using inspection, long division, or, for the more complicated examples, a computer algebra system.
	PC.AAPR.7	Understand that rational expressions form a system analogous to the rational numbers, closed under addition, subtraction, multiplication, and division by a nonzero rational expression; add, subtract, multiply, and divide rational expressions.
Reasoning with Equations and Inequalities	**The student will:**	
	PC.AREI.7	Solve a simple system consisting of a linear equation and a quadratic equation in two variables algebraically and graphically. Understand that such systems may have zero, one, two, or infinitely many solutions.
	PC.AREI.8	Represent a system of linear equations as a single matrix equation in a vector variable.
	PC.AREI.9	Using technology for matrices of dimension 3×3 or greater, find the inverse of a matrix if it exists and use it to solve systems of linear equations.
	PC.AREI.11	Solve an equation of the form $f(x) = g(x)$ graphically by identifying the x-coordinate(s) of the point(s) of intersection of the graphs of $y = f(x)$ and $y = g(x)$.
Structure and Expressions	**The student will:**	
	PC.ASE.1	Interpret the meanings of coefficients, factors, terms, and expressions based on their real-world contexts. Interpret complicated expressions as being composed of simpler expressions.
	PC.ASE.2	Analyze the structure of binomials, trinomials, and other polynomials in order to rewrite equivalent expressions.
	PC.ASE.4	Derive the formula for the sum of a finite geometric series (when the common ratio is not 1), and use the formula to solve problems including applications to finance.

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Building Functions	**The student will:**	
	PC.FBF.1	Write a function that describes a relationship between two quantities. b. Combine functions using the operations addition, subtraction, multiplication, and division to build new functions that describe the relationship between two quantities in mathematical and real-world situations.
	PC.FBF.3	Describe the effect of the transformations $kf(x)$, $f(x)+k$, $f(x+k)$, and combinations of such transformations on the graph of $y=f(x)$ for any real number k. Find the value of k given the graphs and write the equation of a transformed parent function given its graph.
	PC.FBF.4	Understand that an inverse function can be obtained by expressing the dependent variable of one function as the independent variable of another, as f and g are inverse functions if and only if $f(x)=y$ and $g(y)=x$, for all values of x in the domain of f and all values of y in the domain of g, and find inverse functions for one-to-one function or by restricting the domain. a. Use composition to verify one function is an inverse of another. b. If a function has an inverse, find values of the inverse function from a graph or table.
	PC.FBF.5	Understand and verify through function composition that exponential and logarithmic functions are inverses of each other and use this relationship to solve problems involving logarithms and exponents.
Interpreting Functions	**The student will:**	
	PC.FIF.4	Interpret key features of a function that models the relationship between two quantities when given in graphical or tabular form. Sketch the graph of a function from a verbal description showing key features. Key features include intercepts; intervals where the function is increasing, decreasing, constant, positive, or negative; relative maximums and minimums; symmetries; end behavior and periodicity.
	PC.FIF.5	Relate the domain and range of a function to its graph and, where applicable, to the quantitative relationship it describes.
	PC.FIF.6	Given a function in graphical, symbolic, or tabular form, determine the average rate of change of the function over a specified interval. Interpret the meaning of the average rate of change in a given context.

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	PC.FIF.7	Graph functions from their symbolic representations. Indicate key features including intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior and periodicity. Graph simple cases by hand and use technology for complicated cases. *(Note: PC.FIF.7a – d are not Graduation Standards.)* a. Graph rational functions, identifying zeros and asymptotes when suitable factorizations are available, and showing end behavior. b. Graph radical functions over their domain show end behavior. c. Graph exponential and logarithmic functions, showing intercepts and end behavior. d. Graph trigonometric functions, showing period, midline, and amplitude.
Linear, Quadratic, and Exponential	**The student will:**	
	PC.FLQE.4*	Express a logarithm as the solution to the exponential equation, $ab^{ct} = d$ where a, c, and d are numbers and the base b is 2, 10, or e; evaluate the logarithm using technology.
Trigonometry	**The student will:**	
	PC.FT.1	Understand that the radian measure of an angle is the length of the arc on the unit circle subtended by the angle.
	PC.FT.2	Define sine and cosine as functions of the radian measure of an angle in terms of the x- and y-coordinates of the point on the unit circle corresponding to that angle and explain how these definitions are extensions of the right triangle definitions. a. Define the tangent, cotangent, secant, and cosecant functions as ratios involving sine and cosine. b. Write cotangent, secant, and cosecant functions as the reciprocals of tangent, cosine, and sine, respectively.
	PC.FT.3	Use special triangles to determine geometrically the values of sine, cosine, tangent for $\frac{\pi}{3}$, $\frac{\pi}{4}$, and $\frac{\pi}{6}$, and use the unit circle to express the values of sine, cosine, and tangent for $\pi - x$, $\pi + x$, and $2\pi - x$ in terms of their values for x, where x is any real number.
	PC.FT.4	Use the unit circle to explain symmetry (odd and even) and periodicity of trigonometric functions.
	PC.FT.5	Choose trigonometric functions to model periodic phenomena with specified amplitude, frequency, and midline.
	PC.FT.6	Define the six inverse trigonometric functions using domain restrictions for regions where the function is always increasing or always decreasing.
	PC.FT.7	Use inverse functions to solve trigonometric equations that arise in modeling contexts; evaluate the solutions using technology, and interpret them in terms of the context.

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	PC.FT.8	Justify the Pythagorean, even/odd, and cofunction identities for sine and cosine using their unit circle definitions and symmetries of the unit circle and use the Pythagorean identity to find $\sin A$, $\cos A$, or $\tan A$, given $\sin A$, $\cos A$, or $\tan A$, and the quadrant of the angle.
	PC.FT.9	Justify the sum and difference formulas for sine, cosine, and tangent and use them to solve problems.
Circles	**The student will:**	
	PC.GCI.5	Derive the formulas for the length of an arc and the area of a sector in a circle, and apply these formulas to solve mathematical and real-world problems.
Expressing Geometric Properties with Equations	**The student will:**	
	PC.GGPE.2	Use the geometric definition of a parabola to derive its equation given the focus and directrix.
	PC.GGPE.3	Use the geometric definition of an ellipse and of a hyperbola to derive the equation of each given the foci and points whose sum or difference of distance from the foci are constant.
Similarity, Right Triangles, and Trigonometry	**The student will:**	
	PC.GSRT.9	Derive the formula $A = \frac{1}{2}ab\sin C$ for the area of a triangle by drawing an auxiliary line from a vertex perpendicular to the opposite side.
	PC.GSRT.10	Prove the Laws of Sines and Cosines and use them to solve problems.
	PC.GSRT.11	Use the Law of Sines and the Law of Cosines to solve for unknown measures of sides and angles of triangles that arise in mathematical and real-world problems.
Complex Number System	**The student will:**	
	PC.NCNS.2	Use the relation $\mathrm{i}^2 = -1$ and the commutative, associative, and distributive properties to add, subtract, and multiply complex numbers.
	PC.NCNS.3	Find the conjugate of a complex number in rectangular and polar forms and use conjugates to find moduli and quotients of complex numbers.
	PC.NCNS.4	Graph complex numbers on the complex plane in rectangular and polar form and explain why the rectangular and polar forms of a given complex number represent the same number.
	PC.NCNS.5	Represent addition, subtraction, multiplication, and conjugation of complex numbers geometrically on the complex plane; use properties of this representation for computation.
	PC.NCNS.6	Determine the modulus of a complex number by multiplying by its conjugate and determine the distance between two complex numbers by calculating the modulus of their difference.
	PC.NCNS.7	Solve quadratic equations in one variable that have complex solutions.

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	PC.NCNS.8	Extend polynomial identities to the complex numbers and use DeMoivre's Theorem to calculate a power of a complex number.
	PC.NCNS.9	Know the Fundamental Theorem of Algebra and explain why complex roots of polynomials with real coefficients must occur in conjugate pairs.
Statistics and Probability – Interpreting Data	**The student will:**	
	PC.NVMQ.1	Recognize vector quantities as having both magnitude and direction. Represent vector quantities by directed line segments, and use appropriate symbols for vectors and their magnitudes.
	PC.NVMQ.2	Represent and model with vector quantities. Use the coordinates of an initial point and of a terminal point to find the components of a vector.
	PC.NVMQ.3	Represent and model with vector quantities. Solve problems involving velocity and other quantities that can be represented by vectors.
	PC.NVMQ.4	Perform operations on vectors. a. Add and subtract vectors using components of the vectors and graphically. b. Given the magnitude and direction of two vectors, determine the magnitude of their sum and of their difference.
	PC.NVMQ.5	Multiply a vector by a scalar, representing the multiplication graphically and computing the magnitude of the scalar multiple.
	PC.NVMQ.6*	Use matrices to represent and manipulate data. *(Note: This Graduation Standard is covered in Grade 8.)*
	PC.NVMQ.7	Perform operations with matrices of appropriate dimensions including addition, subtraction, and scalar multiplication.
	PC.NVMQ.8	Understand that, unlike multiplication of numbers, matrix multiplication for square matrices is not a commutative operation, but still satisfies the associative and distributive properties.
	PC.NVMQ.9	Understand that the zero and identity matrices play a role in matrix addition and multiplication similar to the role of 0 and 1 in the real numbers. The determinant of a square matrix is nonzero if and only if the matrix has a multiplicative inverse.
	PC.NVMQ.10	Multiply a vector by a matrix of appropriate dimension to produce another vector. Work with matrices as transformations of vectors.
	PC.NVMQ.11	Apply 2×2 matrices as transformations of the plane, and interpret the absolute value of the determinant in terms of area.

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South Carolina College- and Career-Ready (SCCCR) Calculus Overview

In South Carolina College- and Career-Ready (SCCCR) Calculus, students build on the conceptual knowledge and the problem-solving skills they learned in previous mathematics courses. This course prepares students for post-secondary mathematical study but is not designed to prepare students for an Advanced Placement exam.

SCCCR Calculus focuses on a conceptual understanding of calculus as well as computational competency. The standards promote a multi-representational approach to calculus with concepts, results, and problems being expressed graphically, numerically, analytically, and verbally. These representations facilitate an understanding of the connections among limits, derivatives, and integrals.

In this course, students are expected to apply mathematics in meaningful ways to solve problems that arise in the workplace, society, and everyday life through the process of modeling. Modeling involves choosing or creating appropriate equations, graphs, functions, or other mathematical representations to analyze real-world situations and answer questions. Use of technological tools, such as hand-held graphing calculators, is important in creating and analyzing mathematical representations used in the modeling process and should be used during instruction and assessment. However, technology should not be limited to hand-held graphing calculators. Students should use a variety of technologies, such as graphing utilities, spreadsheets, and computer algebra systems, to solve problems and to master standards in all Key Concepts of this course.

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South Carolina College- and Career-Ready (SCCCR) Calculus

South Carolina College- and Career-Ready Mathematical Process Standards

The South Carolina College- and Career-Ready (SCCCR) Mathematical Process Standards demonstrate the ways in which students develop conceptual understanding of mathematical content and apply mathematical skills. As a result, the SCCCR Mathematical Process Standards should be integrated within the SCCCR Content Standards for Mathematics for each grade level and course. Since the process standards drive the pedagogical component of teaching and serve as the means by which students should demonstrate understanding of the content standards, the process standards must be incorporated as an integral part of overall student expectations when assessing content understanding.

Students who are college- and career-ready take a productive and confident approach to mathematics. They are able to recognize that mathematics is achievable, sensible, useful, doable, and worthwhile. They also perceive themselves as effective learners and practitioners of mathematics and understand that a consistent effort in learning mathematics is beneficial.

The Program for International Student Assessment defines mathematical literacy as "an individual's capacity to formulate, employ, and interpret mathematics in a variety of contexts. It includes reasoning mathematically and using mathematical concepts, procedures, facts, and tools to describe, explain, and predict phenomena. It assists individuals to recognize the role that mathematics plays in the world and to make the well-founded judgments and decisions needed by constructive, engaged and reflective citizens" (Organization for Economic Cooperation and Development, 2012).

A mathematically literate student can:

1. **Make sense of problems and persevere in solving them.**
    a. Relate a problem to prior knowledge.
    b. Recognize there may be multiple entry points to a problem and more than one path to a solution.
    c. Analyze what is given, what is not given, what is being asked, and what strategies are needed, and make an initial attempt to solve a problem.
    d. Evaluate the success of an approach to solve a problem and refine it if necessary.

2. **Reason both contextually and abstractly.**
    a. Make sense of quantities and their relationships in mathematical and real-world situations.
    b. Describe a given situation using multiple mathematical representations.
    c. Translate among multiple mathematical representations and compare the meanings each representation conveys about the situation.
    d. Connect the meaning of mathematical operations to the context of a given situation.

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3. **Use critical thinking skills to justify mathematical reasoning and critique the reasoning of others.**
    a. Construct and justify a solution to a problem.
    b. Compare and discuss the validity of various reasoning strategies.
    c. Make conjectures and explore their validity.
    d. Reflect on and provide thoughtful responses to the reasoning of others.

4. **Connect mathematical ideas and real-world situations through modeling.**
    a. Identify relevant quantities and develop a model to describe their relationships.
    b. Interpret mathematical models in the context of the situation.
    c. Make assumptions and estimates to simplify complicated situations.
    d. Evaluate the reasonableness of a model and refine if necessary.

5. **Use a variety of mathematical tools effectively and strategically.**
    a. Select and use appropriate tools when solving a mathematical problem.
    b. Use technological tools and other external mathematical resources to explore and deepen understanding of concepts.

6. **Communicate mathematically and approach mathematical situations with precision.**
    a. Express numerical answers with the degree of precision appropriate for the context of a situation.
    b. Represent numbers in an appropriate form according to the context of the situation.
    c. Use appropriate and precise mathematical language.
    d. Use appropriate units, scales, and labels.

7. **Identify and utilize structure and patterns.**
    a. Recognize complex mathematical objects as being composed of more than one simple object.
    b. Recognize mathematical repetition in order to make generalizations.
    c. Look for structures to interpret meaning and develop solution strategies.

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South Carolina College- and Career-Ready (SCCCR) Calculus

Key Concepts	Standards	
Limits and Continuity	**The student will:**	
	C.LC.1	Understand the concept of a limit graphically, numerically, analytically, and contextually. a. Estimate and verify limits using tables, graphs of functions, and technology. b. Calculate limits, including one-sided limits, algebraically using direct substitution, simplification, rationalization, and the limit laws for constant multiples, sums, differences, products, and quotients. c. Calculate infinite limits and limits at infinity. Understand that infinite limits and limits at infinity provide information regarding the asymptotes of certain functions, including rational, exponential and logarithmic functions.
	C.LC.2	Understand the definition and graphical interpretation of continuity of a function. a. Apply the definition of continuity of a function at a point to solve problems. b. Classify discontinuities as removable, jump, or infinite. Justify that classification using the definition of continuity. c. Understand the Intermediate Value Theorem and apply the theorem to prove the existence of solutions of equations arising in mathematical and real-world problems.
Derivatives	**The student will:**	
	C.D.1	Understand the concept of the derivative of a function geometrically, numerically, analytically, and verbally. a. Interpret the value of the derivative of a function as the slope of the corresponding tangent line. b. Interpret the value of the derivative as an instantaneous rate of change in a variety of real-world contexts such as velocity and population growth. c. Approximate the derivative graphically by finding the slope of the tangent line drawn to a curve at a given point and numerically by using the difference quotient. d. Understand and explain graphically and analytically the relationship between differentiability and continuity. e. Explain graphically and analytically the relationship between the average rate of change and the instantaneous rate of change. f. Understand the definition of the derivative and use this definition to determine the derivatives of various functions.
	C.D.2	Apply the rules of differentiation to functions. a. Know and apply the derivatives of constant, power, trigonometric, inverse trigonometric, exponential, and logarithmic functions. b. Use the constant multiple, sum, difference, product, quotient, and chain rules to find the derivatives of functions. c. Understand and apply the methods of implicit and logarithmic differentiation.

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	C.D.3	Apply theorems and rules of differentiation to solve mathematical and real-world problems. a. Explain geometrically and verbally the mathematical and real-world meanings of the Extreme Value Theorem and the Mean Value Theorem. b. Write an equation of a line tangent to the graph of a function at a point. c. Explain the relationship between the increasing/decreasing behavior of f and the signs of f'. Use the relationship to generate a graph of f given the graph of f', and vice versa, and to identify relative and absolute extrema of f. d. Explain the relationships among the concavity of the graph of f, the increasing/decreasing behavior of f' and the signs of f''. Use those relationships to generate graphs of f, f', and f'' given any one of them and identify the points of inflection of f. e. Solve a variety of real-world problems involving related rates, optimization, linear approximation, and rates of change.
Integrals	**The student will:**	
	C.I.1	Understand the concept of the integral of a function geometrically, numerically, analytically, and contextually. a. Explain how the definite integral is used to solve area problems. b. Approximate definite integrals by calculating Riemann sums using left, right, and mid-point evaluations, and using trapezoidal sums. c. Interpret the definite integral as a limit of Riemann sums. d. Explain the relationship between the integral and derivative as expressed in both parts of the Fundamental Theorem of Calculus. Interpret the relationship in terms of rates of change.
	C.I.2	Apply theorems and rules of integration to solve mathematical and real-world problems. a. Apply the Fundamental Theorems of Calculus to solve mathematical and real-world problems. b. Explain graphically and verbally the properties of the definite integral. Apply these properties to evaluate basic definite integrals. c. Evaluate integrals using substitution.

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Postsecondary Endorsements

CLEMSON
UNIVERSITY

CERTIFICATION OF COLLEGE- AND CAREER-READY STANDARDS

On behalf of the public institution of higher education listed below, I am authorized to endorse the 2015 South Carolina Standards for English Language Arts and Mathematics as content standards for kindergarten through 12th grade that build towards college and career readiness by the time of high school graduation. Students who meet these standards will not need remedial course work at the postsecondary level.

Signature

Printed Name: **Robert H. Jones**

Title: **Executive Vice President for Academic Affairs and Provost**

Institution: **Clemson University**

Date: **Monday, February 16, 2015**

21,857, of which 17,260 are undergraduate students
Official Fall Enrollment Numbers

VICE PRESIDENT FOR ACADEMIC AFFAIRS & PROVOST
206 Sikes Hall Clemson, SC 29634-5101
864.656.3243 FAX 864.656.0851

CERTIFICATION OF COLLEGE- AND CAREER-READY STANDARDS

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Signature

J. Ralph Byington
Printed Name

Provost and Senior Vice President for
Academic and Student Affairs
Title

Coastal Carolina University
Institution

February 25, 2015
Date

9,976
Official Fall Enrollment Numbers

CERTIFICATION OF COLLEGE- AND CAREER-READY STANDARDS

On behalf of the public institution of higher education listed below, I am authorized to endorse the 2015 South Carolina Standards for English Language Arts and Mathematics as content standards for kindergarten through 12th grade that build towards college and career readiness by the time of high school graduation. Students who meet these standards will not need remedial course work at the postsecondary level.

Signature

DAVID MASH

Printed Name

Provost and VP for Academic Affairs

Title

Lander University

Institution

February 12, 2015

Date

Headcount 2787 / FTE 2616

Official Fall Enrollment Numbers

THE CITADEL
THE MILITARY COLLEGE OF SOUTH CAROLINA

OFFICE OF THE PROVOST AND DEAN OF THE COLLEGE

27 February 2015

Mr. David Whittemore
Chair of the EOC
PO Box 11867
Columbia, SC 29211

FAX: 803.734.6167

Dear Mr. Whittemore:

The Citadel supports the *Evaluation of the Draft South Carolina College and Career Ready Standards* as submitted by the South Carolina Department of Education on October 21 and 22, 2014.

Sincerely,

Samuel M. Hines, Jr.
Provost and Dean of the College

SMH/cd

171 Moultrie Street, Charleston, SC 29409
(843) 953-5007

Comments on South Carolina's College and Career Ready Standards for English/Language Arts

Larry G. Daniel

The Citadel

I have reviewed the draft of the College and Career Standards for English/Language Arts (ELA) as drafted by the South Carolina Department of Education. The process for developing these draft standards included an appropriate iterative process whereby writing teams from the state's P-12 schools developed standards; received input and feedback from panels of individuals from higher education, state government, business/industry, and community; and redrafted the standards to reflect the feedback received.

Though one might argue over fine particulars of the standards at the various grade levels, these standards *in toto* reflect appropriately the language, reading, and communication skills that graduates of South Carolina's schools would need to be successful in college and career. The standards are outcomes focused as opposed to a mere focus on activities in which students might engage during the learning process. This focus on outcomes allows for visualization of what the graduate would know and be able to do upon entry into postsecondary education and the world of work. It is my opinion that the standards are appropriate for achieving the desire outcomes, and, in my judgment as an educator, the standards in present form would stand to satisfy the objectives of Act 200.

Particular strengths of the standards include, but are not necessarily limited to, the following:

- The standards focus on "disciplinary" and "inquiry based" literacy outcomes. These outcomes assure that students will be able to apply reading, writing, and speaking skills to specific contexts (i.e., different subject areas and different "real world" situations).
- Standards in the area of reading/literacy reflect the ability of the student to read for understanding and to use language effectively beyond classroom settings.
- Literacy standards at various levels include grade-appropriate fundamental reading, writing, and communication skills.
- The standards focus on development of critical thinking through language.
- The standards focus on students' understanding of informational/explanatory (nonfiction) text. Though understanding of narrative text is important, the focus on informational text is more likely to result in reading outcomes transferable to college and career.
- The standards contain multiple references to "multimedia sources" as well as print text.
- The standards address speaking and listening skills, including communication etiquette and understanding of non-verbal communication.
- Writing standards include use of creative language, figures of speech, and other appropriate elements of expression.
- Standards focused on literary text provide for students' exposure to writings from various genres.

Comments on South Carolina's College and Career Ready Standards for Mathematics

Larry G. Daniel

The Citadel

I have reviewed the draft of the College and Career Standards for Mathematics as drafted by the South Carolina Department of Education. The process for developing these draft standards included an appropriate iterative process whereby writing teams from the state's P-12 schools developed standards; received input and feedback from panels of individuals from higher education, state government, business/industry, and community; and redrafted the standards to reflect the feedback received.

Though one might argue over fine particulars of the standards at the various grade levels, these standards *in toto* reflect appropriately reflect the mathematical knowledge and skills that graduates of South Carolina's schools would need to be successful in college and career. The standards are outcomes focused as opposed to a mere focus on activities in which students might engage during the learning process. This focus on outcomes allows for visualization of what the graduate would know and be able to do upon entry into postsecondary education and the world of work. It is my opinion that the standards are appropriate for achieving the desire outcomes, and, in my judgment as an educator, the standards in present form would stand to satisfy the objectives of Act 200.

Particular strengths of the standards include, but are not necessarily limited to, the following:

- Mastery of basic skills is reinforced by application of the skills throughout the standards.
- Standards focus on mathematics problem solving and use of mathematics in real life situations at all age/grade levels.
- The skills include focus on the development of mathematical reasoning.
- Knowledge and skills at each level are logically ordered.
- Standards include appropriate applications of knowledge and skills in the areas of algebra, geometry, pre-calculus, calculus and probability and statistics.

CERTIFICATION OF COLLEGE- AND CAREER-READY STANDARDS

On behalf of the public institution of higher education listed below, I am authorized to endorse the 2015 South Carolina Standards for English Language Arts and Mathematics as content standards for kindergarten through 12th grade that build towards college and career readiness by the time of high school graduation. Students who meet these standards will not need remedial course work at the postsecondary level.

Signature

Michael D. Amiridis
Printed Name

Executive Vice President for Academic Affairs and Provost
Title

U-S-C- Columbia
Institution

Feb 11, 2015
Date

31,009 (01/22/2015)
Official Fall Enrollment Numbers

From: MOORE, TOM [mailto:TMOORE@USCUPSTATE.EDU]
Sent: Wednesday, February 18, 2015 1:37 PM
To: Barton, Melanie
Cc: dwhittem@bellsouth.net; DannyMerck@pickens.k12.sc.us; CARSON, WARREN J; MASTERSON, JOHN
Subject: Endorsement

Dear Executive Director Barton,

On behalf of USC Upstate, I am pleased to endorse the ELA and Mathematics standards presented on February 12, 2015, by the State Superintendent of Education to the ACAP at the SC CHE as "college and career ready."

Thank you,

Thomas F. Moore, Ph.D.
Chancellor

UPSTATE
University of South Carolina Upstate

800 University Way
Spartanburg, SC 29303
864-503-5200

CERTIFICATION OF COLLEGE- AND CAREER-READY STANDARDS

On behalf of the public institution of higher education listed below, I am authorized to endorse the 2015 South Carolina Standards for English Language Arts and Mathematics as content standards for kindergarten through 12th grade that build towards college and career readiness by the time of high school graduation. Students who meet these standards will not need remedial course work at the postsecondary level.

W Franklin Evans
Signature

W. Franklin Evans
Printed Name

Interim Provost
Title

SC State University
Institution

20 Feb 2015
Date

3,331
Official Fall Enrollment Numbers

CERTIFICATION OF COLLEGE- AND CAREER-READY STANDARDS

On behalf of the public institution of higher education listed below, I am authorized to endorse the 2015 South Carolina Standards for English Language Arts and Mathematics as content standards for kindergarten through 12th grade that build towards college and career readiness by the time of high school graduation. Students who meet these standards will not need remedial course work at the postsecondary level.

Debra C. Boyd
Signature

DEBRA C. BOYD
Printed Name

Acting President and Provost
Title

Winthrop University
Institution

3.4.15
Date

6,024
Official Fall Enrollment Numbers

FYI

Public high school 4-year adjusted cohort graduation rate (ACGR) for the United States, the 50 states and the District of Columbia: School years 2010-11 to 2012-13

	Adjusted Cohort Graduation Rate		
State	2010-11	2011-12	2012-13
United States[1]	**79**	**80**	**81**
Alabama	72	75	80
Alaska	68	70	72
Arizona	78	76	75
Arkansas	81	84	85
California	76	79 [2]	80
Colorado	74	75	77
Connecticut	83	85	86
Delaware	78	80	80
District of Columbia	59	59	62
Florida	71	75	76
Georgia	67	70	72
Hawaii	80	81 [2]	82
Idaho[3]	—	—	—
Illinois	84	82	83
Indiana	86	86	87
Iowa	88	89	90
Kansas	83	85	86
Kentucky[3]	—	—	86
Louisiana	71	72	74
Maine	84	85	86
Maryland	83	84	85
Massachusetts	83	85	85
Michigan	74	76	77
Minnesota	77	78	80
Mississippi	75	75	76
Missouri	81	84 [2]	86
Montana	82	84	84
Nebraska	86	88	88
Nevada	62	63	71
New Hampshire	86	86	87
New Jersey	83	86	88
New Mexico	63	70	70
New York	77	77	77
North Carolina	78	80	83

North Dakota	86	87	88
Ohio	80	81	82
Oklahoma[3]	—	—	85
Oregon	68	68	69
Pennsylvania	83	84	86
Rhode Island	77	77	80
South Carolina	74	75	78
South Dakota	83	83	83
Tennessee	86	87	86
Texas	86	88	88
Utah	76	80	83
Vermont	87	88	87
Virginia	82	83	84
Washington	76	77	76
West Virginia	78	79	81
Wisconsin	87	88	88
Wyoming	80	79	77

— Not available.

[1] The United States 4-year ACGR was estimated using both the reported 4-year ACGR data from reporting states and the District of Columbia and using imputed data for Idaho, Kentucky, and Oklahoma for school years 2010-11 and 2011-12, and imputed data for Idaho for school year 2012-13.

[2] School year 2011-12 data for California, Hawaii, and Missouri were revised subsequent to the publication of these data in NCES 2014-391. The estimated United States ACGR includes these revisions.

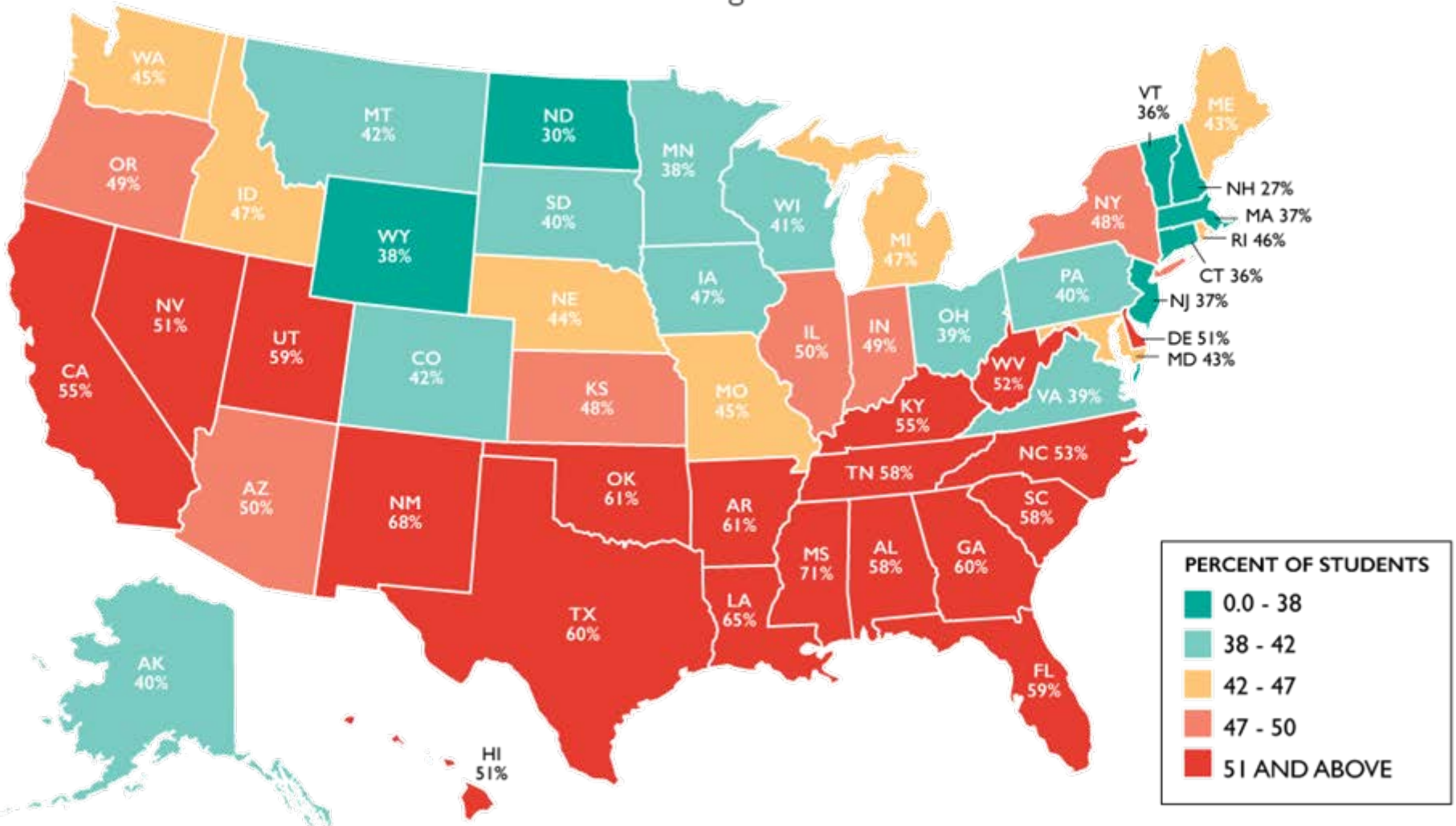
[3] The Department of Education's Office of Elementary and Secondary Education approved a timeline extension for these states to begin reporting 4-year ACGR data, resulting in the 4-year ACGR not being available in one or more of the school years shown.

NOTE: The 4-year ACGR is the number of students who graduate in 4 years with a regular high school diploma divided by the number of students who form the adjusted cohort for the graduating class. From the beginning of 9th grade (or the earliest high school grade), students who are entering that grade for the first time form a cohort that is "adjusted" by adding any students who subsequently transfer into the cohort and subtracting any students who subsequently transfer out, emigrate to another country, or die.

SOURCE: ED*Facts* /Consolidated State Performance Report, school years 2010-11, 2011-12, and 2012-13, http://www2.ed.gov/admins/lead/account/consolidated/index.html. This table was prepared January 2015.

PERCENT OF LOW INCOME STUDENTS IN U.S. PUBLIC SCHOOLS 2013

National Average: 51%



SOUTHERN EDUCATION FOUNDATION | *SOUTHERNEDUCATION.ORG*

Data Source: U.S. Department of Education, National Center for Education Statistics, Common Core of Data

SOUTHERN EDUCATION FOUNDATION

Research Bulletin

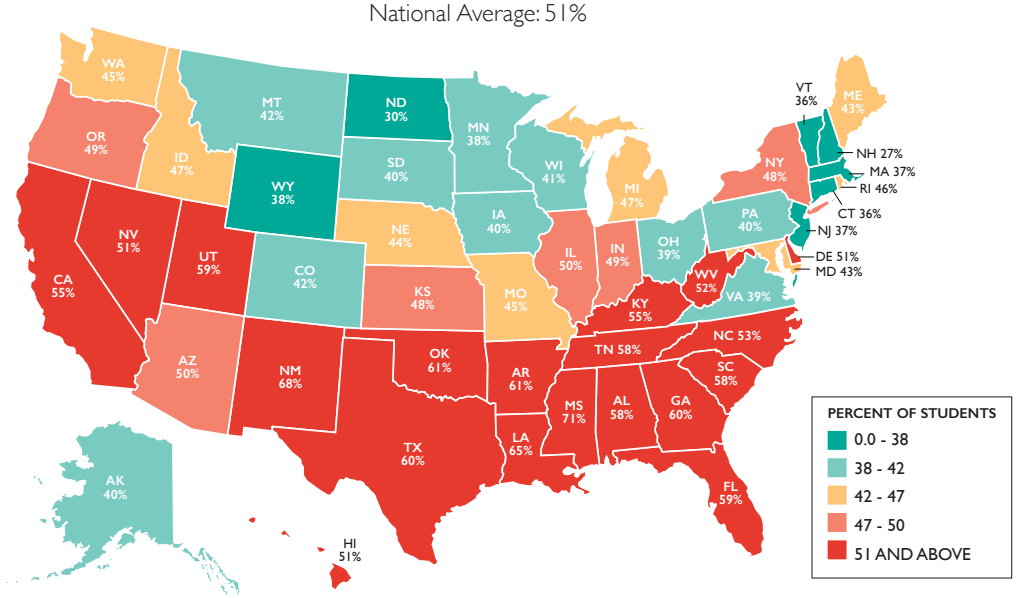
A New Majority

Low Income Students Now a Majority In the Nation's Public Schools

January, 2015

PERCENT OF LOW INCOME STUDENTS IN U.S. PUBLIC SCHOOLS 2013

National Average: 51%



SOUTHERN EDUCATION FOUNDATION | *SOUTHERNEDUCATION.ORG*

Data Source: U.S. Department of Education, National Center for Education Statistics, Common Core of Data

For the first time in recent history, a majority of the schoolchildren attending the nation's public schools come from low income families. The latest data collected from the states by the National Center for Education Statistics (NCES), evidence that 51 percent of the students across the nation's public schools were low income in 2013.

The pattern was spread across the nation. Half or more of the public schoolchildren in 21 states were eligible to receive free or reduced-price lunches, a benefit available only to families living in poverty or near-poverty in 2013.[1] In 19 other states, low income students constituted between 40 percent and 49 percent of the states' public school enrollment. In other words, very high proportions of low income students were evident in four-fifths of the 50 states in 2013 (See Appendix 1).

This defining moment in enrollment in public education in the United States comes as a consequence of a steadily growing trend that has persisted over several decades. In 1989, less than 32 percent of the nation's public school students were low-income. By 2000, the national rate as compiled and calculated by NCES had increased to over 38 percent. By 2006, the national rate was 42 percent and, after the Great Recession, the rate climbed in 2011 to 48 percent. NCES data shows that in 2012 the rate of low income students was barely below one-half –49.6 percent. In 2013, the rate crossed the threshold of one half so that in 2013 low income students became a new majority in the nation's public schools.

While found in large proportions throughout the United States, the numbers of low income students attending public schools in the South and in the West are extraordinarily high. Thirteen of the 21 states with a majority of low income students in 2013 were located in the South, and six of the other 21 states were in the West.

Mississippi led the nation with the highest rate: 71 percent, almost three out of every four public school children in Mississippi, were low-income. The nation's second highest rate was found in New Mexico, where 68 percent of all public school students were low income in 2013.

Southern states comprised 12 of the next 14 states with the highest rates of low income students. Louisiana's rate was 65 percent in 2013, followed by Arkansas and Oklahoma with 61 percent. (Had it been granted statehood, the District of Columbia with a rate of 61 percent would have ranked among this group and would have made the total count 22 states with a majority of low income students.) Following were Texas and Georgia, where 60 percent of their public schoolchildren were low income.

1 This update was developed and written by Steve Suitts, Vice President of the Southern Education Foundation (SEF) with the assistance of Pamela Barba, SEF Graphic Designer, and Katherine Dunn, SEF Program Director. It follows two SEF reports, A New Majority: Low Income Students in the South's Public Schools (2007) and Update -A New Majority: Low Income Students in the South and Nation (2013). Students are eligible for free meals at public schools if they live in households where the income is no more than 135 percent of the poverty threshold. They are eligible for reduced-price lunches if their household income is no more than 185 percent. In 2013, for example, a student in a household with a single parent with an annual income of less than $19,669 was eligible for a free lunch or less than $27,991 for a reduced-price meal in a public school.

21 STATES WITH A MAJORITY OF LOW INCOME STUDENTS: 2013

MISSISSIPPI	71%		ALABAMA	58%
NEW MEXICO	68%		CALIFORNIA	55%
LOUISIANA	65%		KENTUCKY	55%
ARKANSAS	61%		NORTH CAROLINA	53%
OKLAHOMA	61%		WEST VIRGINIA	52%
TEXAS	60%		DELAWARE	51%
GEORGIA	60%		NEVADA	51%
UTAH	59%		ARIZONA	51%
FLORIDA	59%		HAWAII	51%
SOUTH CAROLINA	58%		ILLINOIS	50%
TENNESSEE	58%			

Source: SEF Calculations of NCES Common Core of Data, 2013

Among the six Western states with a majority of low income students, Utah (59 percent) and California (55 percent) had especially high rates. Nevada, Arizona, and Hawaii were the remaining, high-ranking Western states. In each state, 51 percent of the public school children were low income in 2013. Altogether, 57 percent of students in the 15-state South were low income, as were 51 percent of the public school students in the 13-state West.

The two states outside the South and West with a majority of low income students attending public schools were Delaware (considered a Southern state in regional counts by the US Census) and Illinois in the Midwest.

In 2013, six other states appeared to be on the verge of reaching a majority of low income students in the near future, if current trends continue. In Indiana and Oregon, 49 percent of the public schoolchildren were low income. In New York and Kansas, the rates were 48 percent. In Idaho and Michigan, rates were 47 percent. New Hampshire was the state with the lowest percentage of low income students: 27 percent of its public school students were eligible for free and reduced lunches.

Implications of the Findings

The development, implications and consequences of the trends behind these findings have been explored and reviewed in prior reports by the Southern Education Foundation, including an updated research report released in October 2013. (See especially pages 11-13 of A New Majority: Low Income Students in the South's Public Schools (2007) and pages 8-13 of Update -A New Majority: Low Income Students in the South and Nation (2013). A few of the observations from these reports, perhaps, bear repeating at this moment.

After low income children became a majority of the public school students in the Southern states in 2006, the SEF report observed: "Currently the South alone faces the implications and consequences of having a new majority of low income students in its public schools… the South also faces a new global economy that requires higher skills and knowledge from all who seek a decent living. In this brave, new world, the people and policymakers of Southern states must realize that continuing the current, uneven level of educational progress will be disastrous. They must understand more fully that today their future and their grandchildren's future are inextricably bound to the success or failure of low income students in the South. If this new majority of students fail in school, an entire state and an entire region will fail simply because there will be inadequate human capital in Southern states to build and sustain good jobs, an enjoyable quality of life, and a well-informed democracy. It is that simple."

In 2013, after reviewing the data, trends, and analysis of student support and achievement for low income students, the report concluded:

"No longer can we consider the problems and needs of low income students simply a matter of fairness… Their success or failure in the public schools will determine the entire body of human capital and educational potential that the nation will possess in the future. Without improving the educational support that the nation provides its low income students – students with the largest needs and usually with the least support -- the trends of the last decade will be prologue for a nation not at risk, but a nation in decline…

"With huge, stubbornly unchanging gaps in learning, schools in the South and across the nation face the real danger of becoming entrenched, inadequately funded educational systems that enlarge the division in America between haves and have-nots and endanger the entire nation's prospects…

"The trends of the last decade strongly suggest that little or nothing will change for the better if schools and communities continue to postpone addressing the primary question of education in America today: what does it take and what will be done to provide low income students with a good chance to succeed in public schools? It is a question of how, not where, to improve the education of a new majority of students.

"Without fundamental improvements in how the South and the nation educate low income students, the trends that this report documents will ricochet across all aspects of American society for generations to come. As a wise American leader once reminded a troubled nation: 'A house divided against itself cannot stand.'"

It remains that simple – and yet that profound for the future of the South and the nation.

Appendix 1

STATE RANKINGS BY PERCENTAGE OF LOW INCOME STUDENTS IN PUBLIC SCHOOLS: 2013

State	Rate		State	Rate
MISSISSIPPI	71%		RHODE ISLAND	46%
NEW MEXICO	68%		WASHINGTON	45%
LOUISIANA	65%		MISSOURI	45%
ARKANSAS	61%		NEBRASKA	44%
OKLAHOMA	61%		MAINE	43%
TEXAS	60%		MARYLAND	43%
GEORGIA	60%		MONTANA	42%
UTAH	59%		COLORADO	42%
FLORIDA	59%		WISCONSIN	41%
SOUTH CAROLINA	58%		PENNSYLVANIA	40%
TENNESSEE	58%		ALASKA	40%
ALABAMA	58%		IOWA	40%
CALIFORNIA	55%		SOUTH DAKOTA	40%
KENTUCKY	55%		OHIO	39%
NORTH CAROLINA	53%		VIRGINIA	39%
WEST VIRGINIA	52%		MINNESOTA	38%
DELAWARE	51%		WYOMING	38%
NEVADA	51%		MASSACHUSETTS	37%
ARIZONA	51%		NEW JERSEY	37%
HAWAII	51%		CONNECTICUT	36%
ILLINOIS	50%		VERMONT	36%
INDIANA	49%		NORTH DAKOTA	30%
OREGON	49%		NEW HAMPSHIRE	27%
NEW YORK	48%		50 States	51%
KANSAS	48%		DISTRICT OF COLUMBIA	61%
IDAHO	47%		USA	51%
MICHIGAN	47%			

Source: SEF Calculations of NCES Common Core of Data, 2013

Appendix 2

PERCENTAGE OF LOW INCOME STUDENTS BY REGION AND BY STATE: 2013

State/Region	Free Lunch	Free/Reduced Lunch		State/Region	Free Lunch	Free/ Reduced Lunch
SOUTH	**50%**	**57%**		**MIDWEST**	**38%**	**44%**
ALABAMA	51%	58%		ILLINOIS	44%	50%
ARKANSAS	52%	61%		INDIANA	41%	49%
FLORIDA	51%	59%		IOWA	33%	40%
GEORGIA	53%	60%		KANSAS	38%	48%
KENTUCKY	48%	55%		MICHIGAN	41%	47%
LOUISIANA	58%	65%		MINNESOTA	31%	38%
MARYLAND	36%	43%		MISSOURI	38%	45%
MISSISSIPPI	64%	71%		NEBRASKA	35%	44%
NORTH CAROLINA	47%	53%		NORTH DAKOTA	23%	30%
OKLAHOMA	51%	61%		OHIO	33%	39%
SOUTH CAROLINA	52%	58%		SOUTH DAKOTA	32%	40%
TENNESSEE	51%	58%		WISCONSIN	35%	41%
TEXAS	53%	60%				
VIRGINIA	32%	39%		**NORTHEAST**	**36%**	**42%**
WEST VIRGINIA	47%	52%		CONNECTICUT	31%	36%
				DELAWARE	46%	51%
WEST	**44%**	**51%**		MAINE	37%	43%
ALASKA	34%	40%		MASSACHUSETTS	32%	37%
ARIZONA	44%	51%		NEW HAMPSHIRE	22%	27%
CALIFORNIA	48%	55%		NEW JERSEY	31%	37%
COLORADO	34%	42%		NEW YORK	41%	48%
HAWAII	40%	51%		PENNSYLVANIA	35%	40%
IDAHO	38%	47%		RHODE ISLAND	40%	46%
MONTANA	34%	42%		VERMONT	31%	36%
NEVADA	44%	51%				
NEW MEXICO	62%	68%		**50 STATES**	**44%**	**51%**
OREGON	42%	49%		DISTRICT OF COLUMBIA	58%	61%
UTAH	48%	59%		USA	44%	51%
WASHINGTON	38%	45%				
WYOMING	27%	38%				

Source: SEF Calculations of NCES Common Core of Data, 2013

SREB

Benchmarking State Implementation of College- and Career-Readiness Standards, Aligned Assessments and Related Reforms

Cross-State Findings

Southern
Regional
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These reports were prepared at SREB by Kimberly Anderson, director, Benchmarking College- and Career-Readiness Standards, and Mary Elizabeth Mira, assistant director, Benchmarking College- and Career-Readiness Standards. Research assistance was provided by Education First.

Six individual reports make up the set – a summary report, plus five reports with detailed state profiles by topic.

Cross-State Findings Report

Timeline and Approach to Standards and Assessments

Aligned Teaching Resources

Professional Development

Evaluation of Teachers and Leaders

Accountability

The *Cross-State Findings Report* summarizes the findings of this research. The five accompanying reports each present a detailed profile of each state's efforts in the topic area. Together, these reports represent the cumulative findings of SREB's Benchmarking College- and Career-Readiness Standards project. These reports replace the preliminary reports SREB released in March 2014. They update the information in the preliminary reports to reflect state efforts and plans between 2010 and summer 2014. Additional benchmarking studies are forthcoming from SREB. All of the reports are available at http://www.sreb.org/page/1600/.

This project is supported by a grant from the Bill & Melinda Gates Foundation. The conclusions are those of SREB and do not necessarily reflect positions or policies of the funder.

Executive Summary

Implementation of college- and career-readiness standards is some of the most important work currently underway in states to improve student achievement and public education overall. **SREB examined the efforts of 14 states** — including 11 SREB states — to support implementation of new college- and career-readiness standards. Researchers reviewed state policy documents and reports, state department of education websites, and other sources such as U.S. Department of Education reports, and then interviewed leaders from state departments of education, local teachers and leaders, members of state boards of education, union leaders, legislators' and governors' staffs, higher education leaders, and representatives of business and community organizations. The goal of the research was to document the steps states have taken and to highlight exemplary efforts, in order to provide feedback to states, foster cross-state dialogue and inform states' drive for continuous improvement.

This *Cross-State Findings Report* summarizes the findings of this research. This report is accompanied by five separate topic-specific reports, each presenting a detailed profile of the 14 states' efforts in one of these five areas: (1) T*imeline and Approach to Standards and Assessments*, (2) *Aligned Teaching Resources*, (3) *Professional Development*, (4*) Evaluation of Teachers and Leaders*, and (5) *Accountability*. Together, these reports represent the cumulative findings of SREB's Benchmarking College- and Career-Readiness Standards project. These reports replace the preliminary reports SREB released in March 2014. These cumulative reports update the information in the preliminary reports to reflect state efforts and plans between 2010 and summer 2014. Additional benchmarking studies are forthcoming from SREB. All of the reports are available at http://www.sreb.org/page/1600/.

Timeline and Approach to Standards and Assessments

Each state's approach to the reform of its standards and related assessments depended on a number of variables. Researchers considered when the state adopted its new standards and how state leaders organized to lead the transition; when the state aligned, or plans to align, its annual assessments to the new standards; whether the state had integrated, or plans to integrate, the new standards into teaching and assessments for students with the most significant cognitive disabilities and English learners; and the structures and initiatives state leaders put in place to support local implementation. Key findings are as follows.

- *Standards:*
  - All of the 14 states in this study adopted the Common Core State Standards (Common Core) or adopted and then modified the Common Core to meet state needs.
  - In all 14 states, the state departments of education expected teachers to begin teaching the standards in classrooms as of 2013-14 or earlier.
  - Since adopting their new standards, six states convened formal reviews of the standards, and one decided to replace them, while three other states have recently undertaken major new initiatives to build upon and support implementation.

- *Assessments:*
  - By 2013-14, eight states administered English language arts (ELA) and math assessments that they reported were fully aligned to their new standards.
  - In 2014-15, 13 states plan to implement fully aligned assessments. Six of these states plan to use tests developed by either the Partnership for Assessment of Readiness for College and Careers (PARCC) Consortium or the Smarter Balanced Assessment Consortium (Smarter Balanced). Nine of these states plan to acquire tests from a vendor or use tests custom developed for them.
  - One state, Tennessee, plans to have fully aligned tests in place by 2015-16. In 2014, legislation delayed the transition to any new assessment for one year, and withdrew the state from PARCC Consortium. Tennessee will continue to administer its Tennessee Comprehensive Assessment Program (TCAP) Achievement Test and end-of-course (EOC) exams in 2014-15, and will use a competitive bidding process to select a fully aligned assessment for 2015-16.
- *Supporting Local Implementation:* Since adopting their new standards, all 14 states have supported local implementation, principally by providing educators with professional learning and online, on-demand instructional resources and materials that are aligned to the new standards.

Leading states, those with the most extensive, coordinated and innovative efforts to align standards and assessments and to support local implementation, are Delaware, Kentucky, Louisiana, Maryland and New York.

Aligned Teaching Resources

This study examined the supplementary online, on-demand instructional resources and materials that state departments of education make available to educators to support instruction based on the new standards. Researchers considered the number and types of tools the states provide, the criteria and processes states use to select and develop these tools, and the support states provide educators to select and design their own.

- *Aligned Resources:* All 14 states provide educators with supplementary online, on-demand instructional resources and materials aligned to the states' new standards; overall, states have provided more resources for ELA and math than for the literacy standards in science, history/social studies and technical subjects. In 2014 alone, most states added significant quantities of new resources to their online archives.
- *Selecting and Developing These Resources:* Most states work with partners and vendors, and four states involve educators heavily in the process. A majority of the states use the EQuIP/Tri-State Rubrics as criteria for gauging alignment.
- *Empowering Educators:* All 14 states have offered some training for teachers on how to select and design their own aligned tools; five states have offered extensive training.

Leading states, those with the most comprehensive array of resources and materials and the most extensive efforts at empowering educators in design and selection, are Colorado, Georgia, Louisiana, Maryland and New York.

Professional Development

This study examined how state departments of education provided initial training for local teachers and leaders to prepare them to implement the new standards; the ongoing professional learning and support they offer to bolster local efforts long-term; and the supplementary online professional learning resources that they make available.

- *Approaches to Professional Learning:* All 14 states designed their initiatives to build local capacity to lead implementation, and several sought to maximize the impact of a small staff at the state department of education. Most of the states had special funding to boost their early initiatives; 10 of the states had won Race to the Top grants.
- *Professional Learning Offered:* All 14 states provided some sort of initial training for district leadership teams, and they all offer at least some ongoing support for teachers and leaders. Three states have deep professional development work, with school-level teams at the heart of their efforts, and four states have extensive teacher-level offerings. Overall, states have provided less professional learning for leaders than for teachers.
- *Sustainability:* Four years into the work of supporting local implementation, states are grappling with how to sustain their professional development efforts. In 2014, four states launched new, major professional development initiatives.

Leading states, those with the most comprehensive training and the deepest collaboration with teachers, leaders, districts and schools, are Delaware, Georgia, Kentucky, Louisiana, Maryland and Tennessee.

Evaluation of Teachers and Leaders

SREB studied the extent to which state teacher and leader evaluation systems are based on professional standards aligned to the new state college- and career-readiness standards; the extent to which the systems incorporate measures aligned to the new college- and career-readiness standards; and the extent to which states foster the use of evaluation data for continuous improvement.

- *Timelines of Reform:* By 2012, all 14 states had begun implementing new or revised teacher and leader evaluation systems. Six states have delayed the impact of evaluation results on personnel decisions until 2014-15 or later.
- *Professional Teaching and Leadership Standards:* Six states developed or updated their professional standards (and one state is in the process of doing so) to articulate more explicitly the key skills, knowledge and practices needed to be effective in a college- and career-readiness environment.
- *Alignment of Measures Within the Systems:*
  - **Classroom Observation Rubrics:** Four states updated their rubrics to provide more explicit guidance on what effective teaching looks like in college- and career-readiness contexts.
  - **Leadership Measures:** Three states updated their leadership rubrics or professional practice criteria (and one state is in the process of doing so) to more explicitly define effective leadership in college- and career-readiness contexts.

- **Measures of Student Growth and Achievement:** See the above section on *Timeline and Approach to Standards and Assessments* for information on state efforts to align annual ELA and math summative assessments. To incorporate student growth and achievement measures from non-tested grades and subjects, most states provide local educators and evaluators with guidance or training to support their selection of measures aligned to the new standards, where appropriate.

Leading states, those with the most comprehensive efforts to align teacher and leader evaluation measures to the new state college- and career-readiness standards, are Colorado, Louisiana and Tennessee.

Accountability

Looking at statewide accountability systems and accountability reporting for the use of federal Title III funds to serve English learners, researchers reviewed the measures states have in place to gauge student learning of the new college- and career-readiness standards and what is known about the extent of alignment of these measures to the standards.

- *In their general statewide accountability systems,*
  - All 14 states have annual summative ELA and math grade-level and course assessments that they reported were or soon will be aligned to their new standards.
  - Eight states have measures of college and career readiness.
  - Three states have other kinds of measures that can provide additional information about teaching and learning of the new standards.
- *For Title III accountability reporting,* 11 of the states use results from English language proficiency (ELP) assessments for English learners that the test developer reported are aligned to the Common Core; three states have plans to align their tests by 2015-16.

Leading states, those with the most extensive set of statewide accountability measures and ELP assessments for Title III reporting that are aligned to their new standards, are Georgia, Kentucky and North Carolina.

Successes, Challenges and Next Steps for States

In this work to implement new standards, assessments and related reforms, states have achieved successes and faced challenges – in varied forms. And they have all begun planning next steps to capitalize on their gains and meet their challenges.

Successes

Across participants in the varied role groups interviewed across all of the states, the following successes were most commonly cited.

- *Comprehensive Reform Efforts:* All 14 states have undertaken comprehensive, multi-year efforts to lead and support implementation of their new standards, aligned assessments and related reforms.
- *Good Reviews of the Standards and State Efforts:* Interviewees across all the role groups interviewed gave good reviews of the standards, noting that the more they worked with them the more they found them to be better than their states' previous standards. Interviewees also universally gave strong

marks to the professional learning and implementation support provided by their state departments of education.

- *More Collaboration:* Several of the departments have expanded their roles, working more closely with local systems, educators, stakeholders — and other states — than they ever have before. Leaders at the K-12 level and in higher education are also working together in unprecedented ways. In some states, higher education leaders participate on states' PARCC or Smarter Balanced leadership teams. In some, higher education faculty have participated in states' professional learning for K-12 teachers. Five of the states participate in the Core to College project, a collaboration that builds a foundation for ongoing work to prepare more high school graduates for success after high school. This collaboration across K-12 and higher education expands efforts to bring policies into alignment and to foster consensus about the knowledge and skills needed for success in K-12, job training, postsecondary education, and careers.

Challenges

Across participants in the varied role groups interviewed across all of the states, the following challenges were most commonly cited.

- *Scale:* These reforms are massive. States as well as districts, schools and teachers need long-term, comprehensive supports to foster real change in local practice. State departments of education are working hard to respond to increased calls from the field for assistance.
- *Complexity and Communication:* Educators and the public need to better understand the new state college- and career-readiness standards. They need to know how these standards differ from states' previous standards and how the more rigorous demands of the new standards inform related initiatives, including new approaches to instruction, new assessments, and new teacher and leader evaluation systems.
- *Variation in Local Implementation:* While many teachers, schools and districts embrace the standards wholeheartedly, far too many are still not prepared to implement them effectively. Moving forward, local educators continue to need information, support and resources to implement the standards with fidelity.
- *Funding:* Many states had large infusions of funding to support their early implementation initiatives, including Race to the Top grants and other external funding. State policy-makers must determine how to continue or modify their initiatives when this temporary influx ends.

Next Steps

Across all the participants in the varied role groups interviewed across all of the states, the following plans for future work at the state level were most commonly cited.

- *Standards and Assessments:* States are planning to press ahead with implementing college- and career-readiness standards and aligned assessments — though the direction of these efforts varies. For example, while several states currently plan to stick with their standards and assessments, in four states (Colorado, Georgia, Maryland and North Carolina) state leaders expect recommendations about how to proceed — keep, modify or change current plans — from review committees later in 2014 or in 2015, and one state is currently developing new standards (South Carolina).

- *Supports for Educators:* State leaders have plans to continue to provide educators with professional development and aligned teaching tools to support long-term implementation of the standards — though the shape of these efforts varies.

- *Communication:* State department of education officials know they must establish more consistent public messaging about what their new standards are, what changes are needed, and how students — and schools, states and businesses — can benefit.

Moving Forward: Learning From Leading States and Supporting Educators

As state departments of education and other state leaders work to capitalize on their successes, tackle their challenges and continuously improve student achievement and public education overall, *SREB encourages each state to continue to support the implementation of its college- and career-readiness standards and aligned assessments. The recommended actions outlined below can help states push forward. They are based on the efforts of leading states and also on what interviewees across the participating states shared about what educators need to realize the promise of these reforms.*

- *Strengthen implementation supports and align targets for educators, particularly in the areas that follow.*

  - **Professional Learning:** State departments of education should continue to provide — and bolster district and school efforts to provide — professional learning and ongoing implementation support for all teachers, school administrators and district leaders.

  - **Teaching Resources:** States should offer sets of sample instructional plans that model rigorous, differentiated instruction for all of the standards in ELA and math K-12, and for all of the literacy standards in history/social studies, science, and technical subjects in grades six through 12. State departments of education should vet these resources using methods and criteria that are rigorous, explicit and systematic. And departments should help more educators learn about the available resources and train educators on how to select and design their own high-quality aligned tools.

  - **Evaluation Systems:** State departments of education should update professional teaching and leadership standards, classroom observation tools and leadership rubrics to articulate more explicitly the new knowledge, skills and practices needed to successfully teach and lead in college- and career-readiness contexts.

  - **Accountability Measures:** States should include multiple measures in their accountability systems beyond the annual tests in ELA and math — for example, measures of college and career readiness and other types of measures that supplement test data and provide a richer picture of local practices and outcomes.

States can enhance their work on the above recommended actions in the following three ways; interviewees across role groups and states suggested these as essential to moving the work of their state, districts and schools forward.

- *Foster commitment to policies and funding.* State education leaders should work together and with leaders in other sectors and the public to foster commitment to policies and funding that will support educators in their work over the long haul to prepare all students for success in postsecondary education and careers.

- *Strengthen the use of data to guide continuous improvement.* State departments of education, districts and schools need to collect, analyze and use data more effectively to understand their practice and to identify efforts that are working, efforts that are not, and places where improvements can be made. Interviewees shared that they need more time built into regular schedules and more professional learning to deepen staff capacity in this area.

- *Augment capacity at state departments of education to address emerging needs.* Interviewees in several of the states shared that their department needs to reorganize, redeploy or increase staff to meet local educators' increased needs for support. Many noted that their department needs more internal expertise in key areas, including content areas, change management, psychometrics, statistics, research and evaluation, teacher evaluation, and talent development. State departments of education can work together to help each other address these needs, and external partners, experts and funders can provide states with resources and know-how.

Introduction

In SREB states, policy-makers have adopted new college- and career-readiness standards as a foundation for strengthening teaching and learning. State departments of education are providing guidance, tools and support for teachers and leaders in schools and districts to help them implement these new standards, aligned assessments and related reforms. This is some of the most important work currently underway in states to improve education systems and to build globally competitive workforces and economies. **SREB examined the recent efforts of 14 states — including 11 SREB states — between 2010 and summer 2014** to support implementation of new college- and career-readiness standards and related reforms.

Reports

This *Cross-State Findings Report* summarizes the findings of SREB's research. This report is accompanied by five separate topic-specific reports, each presenting a detailed profile of each of the 14 states' efforts in one of five areas. Together, these reports represent the cumulative findings of SREB's Benchmarking College- and Career-Readiness Standards project. These reports replace the preliminary reports SREB released in March 2014. They update the information in the preliminary reports to reflect state efforts and plans between 2010 and summer 2014. Additional benchmarking studies are forthcoming from SREB. All of the reports are available at http://www.sreb.org/page/1600/.

This Cross-State Findings Report includes the information listed below.

- *Descriptions of trends* across 14 states in their efforts to support local implementation of their new standards, assessments, and related reforms, with a section on each of the following topics:
  1. Timeline and Approach to Standards and Assessments
  2. Aligned Teaching Resources
  3. Professional Development
  4. Evaluation of Teachers and Leaders
  5. Accountability
- *Highlights from states* with leading efforts
- *Successes and challenges* states are encountering, including perspectives from the field on how the work is going; next steps states anticipate; and support states need to move the work forward

The reports in this series describe state efforts and plans between 2010 and summer 2014:

- This Cross-State Findings Report with descriptions of trends in the work across the 14 states and perspectives from the field on how the work is going
- Five accompanying topic area reports with detailed state-by-state profiles

These reports can be accessed at SREB.org/1600.

Five accompanying topic area reports provide state-by-state profiles with detailed looks at each state's efforts in the five topic areas listed above.

Project Overview

Purpose

SREB prepared these publications as part of its Benchmarking College- and Career-Readiness Standards project. The purpose of these reports is to support states in their efforts to lead reform by tracking and reporting on their progress to implement key policies and initiatives. This project builds on SREB's history of providing state education leaders and policy-makers with actionable feedback on their efforts. This feedback can serve as a forum for discussion and collaboration to inform improvement efforts. These reports also establish a baseline for SREB's ongoing tracking and reporting.

Participating States

Fourteen states, including 11 SREB states[1], joined with SREB in this project. SREB worked with a point person in each state's department of education to facilitate the state's participation.

SREB participating states:

Alabama	Kentucky	Mississippi	Tennessee
Delaware	Louisiana	North Carolina	West Virginia
Georgia	Maryland	South Carolina	

States participating from outside the SREB region:

Colorado	New York	Pennsylvania

Research Methodology

A team of SREB researchers and consultants gathered information from the following two sources.

- *Reviews of Publicly Available Information:* Researchers reviewed state policy documents and reports, state department of education websites, and other sources such as U.S. Department of Education reports.
- *Interviews:* Researchers interviewed leaders from state departments of education, members of state boards of education, union leaders, legislators' and governors' staffs, teachers, principals, district superintendents, higher education leaders, and representatives of business and community organizations. In most states, people representing each of these perspectives provided information, although all these individuals were not available in every state.

Each state department of education reviewed and provided feedback on drafts of the reports on its state, to ensure the accuracy of the information.

New College- and Career-Readiness Standards in the States

States have been working over the past 20 years to set expectations for what students should know and be able to do, in order to strengthen their education systems and prepare their graduates for success in

[1] Florida participated early in the project and was represented in the *preliminary versions* of these reports, published in March 2014. Florida is not represented in these final reports.

increasingly competitive local, national and global economies. The No Child Left Behind Act of 2001 (NCLB) required states to adopt student learning standards for English language arts (ELA) and math, but left it to each state to develop those standards. NCLB also required states to use assessments to measure student progress on their standards, but each state developed its own assessments and set its own levels of achievement required to demonstrate proficiency. This resulted in wide variation across the states in the knowledge and skills deemed necessary for students, and the levels of mastery they had to demonstrate to be considered proficient. Even when students scored well on their own states' assessments, far too many scored below the Basic achievement level on the National Assessment of Education Progress (NAEP), a test that is considered to be the Nation's Report Card and that allows comparison of student achievement results across states (Bandeira de Mello, 2011; U.S. Chamber of Commerce, 2014). Also, more than a third of high school graduates entering colleges and universities were under-prepared for the rigors of postsecondary work and were required to take remedial courses. This jeopardized their persistence in college and increased the cost of their education and their time to degree completion (Barnett & Fay, 2013). Further, students in the United States have performed below their peers from other countries on international assessments in recent years (Baldi et al., 2007; Darling-Hammond, Wilhoit & Pittenger, 2014; Kena et al., 2014). All of these forces have hampered states' efforts to empower their citizens and their industries to be globally competitive.

New College- And Career-Readiness Standards

States — including all 16 in the SREB region — have adopted new college- and career-readiness standards in response to challenges that emerged as part of states' work over the past 20 years to strengthen their education systems and prepare their graduates for success in increasingly competitive local, national and global economies. The 14 states in this study (11 in the SREB region) took different approaches to developing their new standards.

In recent years, states — including all 16 in the SREB region — have adopted new, more rigorous student learning standards. States adopted these standards to set the expectation that when students graduate from high school they will be prepared for success in college and careers. The 14 states in this study took different approaches to developing their new standards.

Related Reforms

Implementation of new college- and career-readiness standards are just one foundational component of states' work to help educators realize the goals of better practice, higher achievement and college and career readiness for all students. Professional development and aligned teaching resources help teachers provide high-quality instruction based on the new standards. Updating measures within teacher and leader evaluation systems and state accountability systems helps educators, schools and districts focus on the kinds of work deemed most essential for helping students master the new standards. The sections below summarize states' efforts in these interrelated areas of work.

Timeline and Approach to Standards and Assessments

What basic decisions and actions have state education policy-makers — at state departments of education in particular — taken to foster successful implementation of their new college- and career-readiness standards and aligned assessments?

Overview of SREB's Look at State Efforts

SREB researchers reviewed the following information about each state's efforts to foster successful implementation of new college- and career-readiness standards and assessments.

- *Leadership Context:* When did the state adopt its new standards? How did state leaders organize to lead the transition, and what other major reform initiatives or legislation informed their plans?
- *Standards:* What is (or was) the state's timeline for implementation?
- *Assessments:* How did the state ensure (or how does it plan to ensure) that its annual summative grade-level and course assessments in ELA and math are aligned to the new standards?
- *Supporting Implementation:* What major structures, routines and supports did the department put in place to support local implementation?
- *Reaching Diverse Learners:* How did the state ensure (or how does it plan to ensure) that its alternate ELA and math standards and assessments for students with the most significant cognitive disabilities, and its English Language Proficiency (ELP) standards and assessments for English learners, are aligned to the state's new college- and career-readiness standards?

Leading State Efforts

All 14 states launched significant efforts in these areas. ***Leading states***, those with the most extensive, coordinated and innovative efforts, are Delaware, Kentucky, Louisiana, Maryland and New York. See the *Highlights From Leading States* section below for descriptions of the work in two of these states.

Leading states stood out according to the following criteria:

- *State leaders, legislation and/or other major education initiatives provided strong support* for the implementation of the new standards and the state's college- and career-readiness agenda.
- *The state's progress in implementing the new standards included efforts at reaching diverse learners,* such as implementing ELP standards and assessments for English learners, as well as alternate standards and assessments for students with the most significant cognitive disabilities, that align to the new college- and career-readiness standards by 2014-15 or soon thereafter.

Leading State Efforts

All 14 states mounted significant efforts to lead and support successful implementation of their new standards and aligned assessments. ***Leading states***, those with the most comprehensive, coordinated and innovative efforts, are Delaware, Kentucky, Louisiana, Maryland and New York.

- *The state has aligned its ELA and math assessments* to the new college- and career-readiness standards, or it continues to pursue plans to acquire aligned assessments by 2014-15.
- *The state department of education has provided extensive implementation support to local districts, schools and teachers.* This support consisted of professional learning that directly reached schools and large numbers of teachers, facilitated collaboration across various levels of the system, and included a large array of aligned teaching resources.

Starting Point: States' Newest Work in This Area

The work described below includes the following most recent developments.

- In 2014, two states (Maryland and Mississippi) refined the Common Core standards and then re-named them to better meet their needs.
- Between 2013 and 2014, six states convened formal review panels to take a further look at their new standards (Colorado, Georgia, Maryland, Mississippi, New York and North Carolina).
- In 2014, one state (South Carolina) decided to replace the Common Core and to develop its own new standards.
- In 2014, six states made changes to their plans for implementing aligned ELA and math annual assessments.
  - Georgia contracted with a vendor to have tests custom developed.
  - Kentucky dropped out of PARCC. Kentucky will use the tests it previously had in place for 2014-15, and is considering options for future years.
  - Louisiana decided not to use the PARCC tests for high school. Instead, Louisiana will continue to use its own high school end-of-course tests.
  - In North Carolina, in 2014 the state Board of Education decided to convene an advisory group to evaluate testing options and provide recommendations for 2017-18. These options could include the Smarter Balanced assessments. However, legislation in 2014 required legislative approval for adoption of any test to assess student achievement on state academic standards.
  - In South Carolina, legislation in 2014 required the state to withdraw from the Smarter Balanced consortium. The state currently is conducting a new assessment procurement process for 2014-15.
  - In Tennessee, legislation in 2014 delayed the transition to any new assessment for one year, and withdrew the state from the PARCC Consortium. Tennessee will continue to administer its own partially aligned exams in 2014-15, and will use a competitive bidding process to select a fully aligned assessment for 2015-16.
- Since 2013, three states (Delaware, Maryland and West Virginia) have launched new state-level or cross-state initiatives that build upon and support their states' new standards.
- In 2014 or 2015, Race to the Top grants, which supported key aspects of 10 states' implementation initiatives, will end. States with Race to the Top grants include Colorado, Delaware, Georgia, Kentucky, Louisiana, Maryland, New York, North Carolina, Pennsylvania and Tennessee.

For a detailed profile of each of the 14 states' efforts in this area between 2010 and summer 2014, see the accompanying topic-specific report in this series on *Timeline and Approach to Standards and Assessments*.

Trends Across the States: Adoption of New Standards

Major reform initiatives and legislation that informed state plans to adopt college- and career-readiness standards

Most of the 14 states had initiatives in place that informed their adoption of new college- and career-readiness standards. For example, in five states (Alabama, Georgia, New York, North Carolina and Tennessee), state education task forces or commissions, or participation in policy reform initiatives such as the American Diploma Project facilitated by Achieve, provided support for adoption of new standards and assessments. Three states enacted legislation that either spurred or supported their adoption (Kentucky in 2009, Colorado in 2008 and South Carolina in 2005). The U.S. Department of Education awarded 10 states Race to the Top grants, which required adoption of college- and career-readiness standards, assessments and related reforms. Race to the Top funds provided funding for initiatives in Colorado, Delaware, Georgia, Kentucky, Louisiana, Maryland, New York, North Carolina, Pennsylvania and Tennessee.

Since 2012, all of the states in this study have received waivers from the U.S. Department of Education for certain provisions of the Elementary and Secondary Education Act (currently known as NCLB). States receiving waivers agreed to adopt college- and career-readiness standards and assessments by 2014-15, along with aligned alternate standards and assessments for students with the most significant cognitive disabilities, and aligned ELP standards and assessments for English learners; to redesign their statewide accountability systems; and to implement educator effectiveness systems that incorporate the use of student performance information such as test scores.

How state leaders organized to lead the transition

In most states, leaders in the state department of education worked with leaders in other sectors — higher education, business, the executive branch, the legislature, education leadership commissions, unions — to gather input from educators across the state on developing timelines for rolling out the standards and plans for supporting local implementation efforts.

Adoption of standards

States began adopting their new standards in 2010, and have taken different approaches to development and adoption. Across the nation, to date, 43 states, the District of Columbia, four territories, and the Department of Defense Education Activity, whose schools serve the children of military families stationed on bases in the United States and around the world, have adopted the Common Core State Standards (Common Core). Adoption by such a large number of states provides a consistent set of high expectations for students, regardless of where they live, a benefit for military families and others who have high rates of mobility during their children's school careers.

The Common Core State Standards Initiative was launched in 2009 (see www.corestandards.org/). It was led by the nation's governors and state education superintendents, through the National Governors Association (NGA) and the Council of Chief State School Officers (CCSSO). Committees of educators and subject-matter experts developed the standards, incorporating extensive feedback from state officials, scholars, assessment developers, professional organizations, educators, parents, students and the public. The standards establish

expectations for what students should know and be able to do at each grade level K-12 and upon graduation from high school in math and ELA, and for literacy in history/social studies, science, and technical subjects in grades six through 12. Released in 2010, the standards were developed to be aligned with college and work expectations; fewer, clearer and more rigorous than most states' previous standards; built on the best of previous state standards; internationally benchmarked to prepare all students for success in the global economy; and based on evidence and research. The standards were adopted voluntarily by states. The standards are distinct from curricula; they are a basis upon which local educators develop curricula.

- *Six of the states in this study adopted the Common Core in 2010, and the Common Core serves as the standards for these states* in math and ELA K-12 and for literacy in history/social studies, science, and technical subjects in grades six through 12: Delaware, Kentucky (referred to as Kentucky Core Academic Standards), Louisiana, North Carolina, South Carolina (to be replaced, see information below) and Tennessee.

- *Eight of the states in this study modified or added to the Common Core after adopting the standards in 2010,* to incorporate content that local stakeholders felt was essential for students in their states and renamed them: Alabama (Alabama College- & Career-Ready Standards), Colorado (Colorado Academic Standards), Georgia (College and Career Georgia Performance Standards), Maryland (Maryland College and Career-Ready Standards), Mississippi (College- and Career-Readiness Standards), New York (Common Core Learning Standards), Pennsylvania (Pennsylvania Core Standards) and West Virginia (Next Generation Content Standards and Objectives).

Trends Across the States: Timelines for Implementing the Standards

Timelines varied across the states for implementing the new standards in classrooms. **All of the 14 states in this study expected teachers to teach the new standards in classrooms by 2013-14.** Kentucky established the earliest start date, beginning in 2010-11. The last states to begin, in 2013-14, were Maryland, Pennsylvania and South Carolina. Some states began implementing all of the standards at one time, while others phased in implementation (for example, by grade level) over two or more years. Four states have rollout timelines that extend into 2014-15: Georgia, Pennsylvania, South Carolina and West Virginia.

After adopting their standards and beginning implementation, **between 2013 and 2014, seven states in the study decided to take another look at their new standards. Six states** — Colorado, Georgia, Maryland, Mississippi, New York and North Carolina — **convened a formal review** of the standards adoption process, the standards themselves, the assessments the state would use to measure student learning on the standards, the state's resources for supporting local implementation, the fiscal impact of these reforms on taxpayers, and/or other aspects of the reform. In most cases the review was mandated by the state's legislature.

Standards Implementation Timelines

All of the 14 states in this study expected teachers to teach the new standards in classrooms by the 2013-14 school year.

- *In Mississippi,* in January 2014 the review committee submitted its report to the Legislature. The report outlined the reasons for the state's adoption of the Common Core, the state Department of Education's implementation efforts, and approximate costs of the new, aligned assessments. The committee plans to continue to monitor the state's implementation of its College- and Career-Readiness Standards, and outcomes.

- *In New York,* in February 2014 the State Board of Regents reviewed findings from a work group of the Board of Regents P-12 Committee and adopted a comprehensive slate of recommendations designed to improve implementation of the state's Common Core Learning Standards.

- *In Colorado, Georgia, Maryland and North Carolina,* state leaders expect findings reports and recommendations from their respective review committees between late 2014 and 2015.

One state, South Carolina, decided to replace the Common Core. Legislation in 2014 required the state Department of Education to develop new standards for ELA and math for implementation in 2015-16. South Carolina will continue to implement the Common Core in 2014-15.

Since 2013, three states have launched new state-level or cross-state initiatives that build upon and support their state's new standards.

- *Delaware:* In 2014, Governor Jack Markell helped to launch the Partnership for Higher Standards led by the Bipartisan Policy Center, the U.S. Chamber of Commerce Foundation and the Hunt Institute. This partnership aims to strengthen support for the Common Core (see http://bipartisanpolicy.org/news/press-releases/2014/03/monday-launching-partnership-support-higher-standards-education).

- *West Virginia:* In 2013, West Virginia joined the Improving Student Learning at Scale Policy Collaborative, a partnership of five other states, the NGA, CCSSO and the National Conference of State Legislatures. The project focuses on Common Core implementation and increasing student achievement (see http://www.nga.org/cms/home/nga-center-for-best-practices/meeting--webcast-materials/page-edu-meetings-webcasts/col2-content/main-content-list/improving-student-learning-at-sc.html). Also, the Legislature passed Senate Bill 359, which requires, among other things, that by 2014-15 the state Board of Education, the Higher Education Policy Commission, and the Council for Community and Technical College Education adopt uniform standards of college and career readiness based on the state's Next Generation Content Standards and Objectives. This requirement has been accomplished. The bill also requires that determination of whether a student is ready for credit-bearing courses in college be based on an assessment which is linked to those standards and that the board align the requirements for a high school diploma with the standards.

- *Maryland:* Maryland's 2013 Senate Bill 740, the College and Career Readiness and College Completion Act, requires, among other things, that beginning in 2014-15 all students must be assessed for college readiness by grade 11; Maryland plans to use the tests from PARCC for this purpose. By 2015-16, the Maryland State Department of Education must collaborate with districts and public community colleges to develop and implement transitional courses for grade 12, or other instructional opportunities aligned to the standards, for students who have not yet achieved college readiness by the end of grade 11.

Trends Across the States: Aligning State Assessments to the New Standards

States have taken different approaches to aligning their annual summative grade-level and course assessments in ELA and math to their new standards. **Early on, some states modified the tests they already had in place.**

- By 2013-14, eight states reported that they *fully aligned* some or all of their tests (grades three through eight and/or high school) to their new standards to assess the full range of the new content: Kentucky in 2011-12; Georgia, New York, North Carolina and Pennsylvania in 2012-13; and Alabama, Delaware and Louisiana in 2013-14.
- Four states made adjustments between 2011-12 and 2013-14 to some or all of their tests to *partially align* them to the new standards, to assess at least some of the new content: Colorado, Delaware, South Carolina and Tennessee.

Thirteen of the states plan to have assessments that are fully aligned to their new standards in place for 2014-15; Tennessee plans to meet this goal by 2015-16. All of the states participated at some point, in some way, with one or both of two consortia that the U.S. Department of Education funded to develop assessments aligned to the Common Core: PARCC (see http://www.parcconline.org/) and Smarter Balanced (see http://www.smarterbalanced.org/). However, six states — Alabama, Georgia, Kentucky, Pennsylvania, South Carolina and Tennessee — decided not to use consortium tests, citing such reasons as cost and the desire to have tests developed specifically for their own state instead of for multiple states. **As of summer 2014, states reported the following plans for 2014-15.**

- *Six states plan to use the new, fully aligned assessments from one of the two consortia.* Four states plan to use PARCC tests: Colorado, Louisiana (for grades three through eight), Maryland and Mississippi. Two states plan to use Smarter Balanced tests: Delaware and West Virginia. The promise of the PARCC and Smarter Balanced tests is to provide students, parents, teachers, the public and policy-makers with results that clearly reflect how well students meet grade-level standards that lead to college- and career-readiness expectations, and that are comparable across states.
- *Nine states plan to use their own fully aligned assessments.* These states have, or plan to have, tests that are either developed for them or acquired from a vendor: Alabama, Georgia, Kentucky, Louisiana (for high school), New York, North Carolina and Pennsylvania. South Carolina is currently engaged in a test procurement process. Tennessee plans to use its existing, partially aligned tests for 2014-15 and plans to select new, fully aligned tests for 2015-16.

Note: The information provided in this report about the alignment of state assessments to states' new standards is based on information available publicly at the time of publication, which was self-reported by the states and test developers.

Assessment Alignment

Thirteen of the states plan to have assessments fully aligned to the new standards in place for the 2014-15 school year; Tennessee plans to meet this goal by 2015-16.

- Six states plan to use tests from either PARCC or Smarter Balanced.
- Nine states have, or plan to have, tests that are either developed for them or acquired from a vendor.

Assessment technology

PARCC, Smarter Balanced and other assessment developers are designing their assessments to be administered on computers. State departments of education have been working with districts and schools to gauge local readiness and to enhance technology infrastructures to administer computer-based tests. For the spring 2015 administration, Delaware, Georgia and Kentucky reported that local technology infrastructures do not pose a major challenge, because districts and schools in these states have been using or phasing in online testing over the last few years. Other states reported that not all of their districts may have the necessary assessment technology infrastructure and hardware in place by spring 2015. Given steep challenges in some locations, especially rural and high-poverty districts, some states have been exploring the option of using paper-based versions of the tests for the first few years. Tennessee and West Virginia took noteworthy approaches to supporting districts as they prepared for computer-based testing: In 2013 the Tennessee Legislature provided extra state funds to help districts augment their technology infrastructures. In West Virginia, for 2011-12 and 2012-13 the state Department of Education, the state Board of Education and the Legislature collaborated to establish a two-year moratorium on spending state funding for new textbooks and materials. Districts could use those funds instead to upgrade their technology systems and digital resources.

Trends Across the States: Supporting Local Implementation

To help local educators learn about and prepare to implement the new standards in classrooms, states put in place various kinds of resources, structures and supports. Two major types of support are **professional learning** and online, on-demand **supplementary instructional resources and materials** that are aligned to the new standards. Whether designed and delivered themselves or in partnership with entities such as regional centers, all of the 14 state departments of education provided some initial training, and they all continue to provide training and supports of various kinds to help educators implement the standards successfully in the long term. Leading states have worked extensively with district and school teams and directly with large numbers of teachers, and this collaboration helps to integrate the work and unite the focus of practitioners and leaders at the state, regional, district and school levels. Some state departments of education have expanded their work to meet the new demands of this reform environment: Veterans in some departments shared that they are providing more kinds of support and resources to local districts, schools and educators than at any time in the past. All of the state departments of education have also provided educators with online, on-demand access to supplementary instructional resources and materials that are aligned to the new standards. Leading states offer an array of tools to support educators in learning about the standards, comprehensive sets of model instructional plans, extensive assessment resources and other tools, and training for teachers on how to develop and select their own aligned materials. **See the sections below on *Professional Development* and *Aligned Teaching Resources* for more detailed information on these efforts.**

Trends Across the States: Reaching Diverse Learners

In most states, the new standards place greater demands on students than previous ones. These demands are especially challenging for students with the most significant cognitive disabilities (those unable to participate in general state assessments, even with accommodations) and for English learners (who must master grade level content while learning the English language). These two groups of students are historically low-achieving, and educators have struggled to help them improve their achievement. One way states can provide support for these students is to implement additional standards and assessments that are aligned to the state's

college- and career-readiness standards: alternate ELA and math standards and assessments for students with significant cognitive disabilities, and ELP standards and assessments for English learners. Indeed, to receive waivers from the U.S. Department of Education for certain provisions of NCLB, states had to commit to adopt these two sets of aligned standards and assessments. These standards and assessments can help educators provide instruction that enables students from these two groups to engage with the rigorous content and language of the college- and career-readiness standards in appropriate ways. States' progress towards this adoption is summarized below.

Alternate standards and assessments for students with the most significant cognitive disabilities

States reported the following plans for aligning these to their new college- and career-readiness standards by 2014-15.

- *Five states plan to use alternate standards and assessments from one of the multi-state consortia* funded by the U.S. Department of Education to develop alternate standards and assessments that are consistent with the PARCC and Smarter Balanced systems. Maryland and South Carolina plan to use the standards and assessments of the National Center and State Collaborative (NCSC, see http://www.ncscpartners.org/), although South Carolina has not finalized plans beyond 2014-15. Mississippi, North Carolina and West Virginia plan to use the standards and assessments of the Dynamic Learning Maps (DLM, see http://dynamiclearningmaps.org/) Alternate Assessment System Consortium.

- *Nine states report that they may or will use their own alternate standards and aligned assessments:* Alabama, Colorado, Delaware, Georgia, Kentucky, Louisiana, New York, Pennsylvania and Tennessee.

English Language Proficiency standards and assessments for English learners

States reported the following plans for aligning these to their new college- and career-readiness standards.

- *Eleven states are using the ELP standards and assessments of the World-Class Instructional Design and Assessment Consortium (WIDA)* in 2014-15: Alabama, Colorado, Delaware, Georgia, Kentucky, Maryland, Mississippi, North Carolina, Pennsylvania, South Carolina and Tennessee. South Carolina, however, has not yet determined what ELP assessment it will use in 2015-16 and beyond. WIDA's ACCESS for ELLs test is designed to measure student mastery of the language skills inherent in the Common Core, and it has been shown in a WIDA alignment study to have moderate to strong alignment (see http://www.wida.us/index.aspx).

- *Two states plan to use the ELP standards and assessments of the English Language Proficiency for the 21st Century (ELPA21) consortium* when they become available in 2015-16: Louisiana and West Virginia. ELPA21 is aligning its standards and assessment to the Common Core (see http://www.ccsso.org/Resources/Programs/ELPA21.html). Currently, Louisiana uses the ELDA test, developed by states partnering with CCSSO (see http://www.ccsso.org/Documents/2010/ELDA_brochure_2010.pdf). West Virginia currently uses its West Virginia Test of English Language Learning (WESTELL). Neither the ELDA nor the WESTELL is aligned to the states' college- and career-readiness standards.

- *New York uses its own* ELP standards, referred to as New Language Arts Progressions, or NLAP, and its New York State English as a Second Language Achievement Test (NYSESLAT). The NYSESLAT was partially aligned to New York's Common Core Learning Standards in 2013-14, and New York reports that it will be fully aligned by 2015-16.

- New York's related work on its Bilingual Common Core Initiative and its Blueprint for English Language Learners (ELLs) Success (which includes eight guiding principles for engaging English learners in Common Core Learning Standards teaching and learning) are also notable efforts to capitalize on the strengths and address the needs of students whose first language is not English. See the *Highlights From Two Leading States* below for more information.

Highlights From Two Leading States

Kentucky

Kentucky's 2009 Senate Bill 1 mandated a new public education assessment and accountability system for 2011-12. This led to Kentucky becoming the first state in the nation to adopt the Common Core, called the Kentucky Core Academic Standards (KCAS), in 2010. A Race to the Top grant supported some of the state's initial efforts to foster successful implementation of the KCAS.

Annual assessments for ELA and math:

- Kentucky was the first state to develop and administer summative statewide assessments in ELA and math that the state reported were fully aligned to the new standards. Since 2011-12, Kentucky has administered the Kentucky Performance Rating of Education Progress (K-PREP) in ELA (reading and writing) and math for grades three through eight. Kentucky uses ACT's QualityCore end-of-course assessments for high school.
- In 2014, Kentucky dropped out of the PARCC Consortium. Kentucky will use the tests it previously had in place for 2014-15, and is considering options for future years.

Professional learning and support for implementation:

- In 2010, Kentucky's Department of Education launched an aggressive three-year professional learning initiative for local leaders, who were then expected to lead reform. Districts established District Leadership Teams (DLTs). The DLTs collaborated with the department, regional educational cooperatives and higher education institutions to receive training, develop district and school implementation plans, and redeliver professional development to local colleagues.
- The department built a structure of interlocking leadership networks for DLT members to receive role-specific support — the Instructional Support Leadership and Superintendents Network for school and district leaders; the Leadership Network for ELA and math teachers; and the Leadership Network for science and social studies teachers in grades six through 12. A Higher Education Network and an Early Learning Leadership Network facilitate coordination of K-12 reforms with efforts in pre-K through higher education.
- From 2013-14 onwards, DLT and network members are expected to lead ongoing professional learning efforts in their communities.
- The department also offers a strong set of online, on-demand resources and materials for educators on its Continuous Instructional Improvement Technology System Web portal (http://education.ky.gov/curriculum/ciits/Pages/default.aspx).

Reaching diverse learners:

- To support students with the most significant cognitive disabilities, Kentucky reports that it aligned its own alternate standards and assessments to the KCAS. In 2014-15, the state may consider adopting the alternate standards and assessments of one of the multi-state alternate assessment consortia, DLM or NCSC; or the state may pursue other plans.
- To support English learners as they work to master the rigorous linguistic demands inherent in the KCAS, Kentucky uses the aligned ELP standards and assessments from the WIDA consortium.

New York

New York's implementation of the Common Core (called the Common Core Learning Standards, or CCLS) is based within the state's comprehensive Regents Reform Agenda. This agenda aims to further college and career readiness for all students through new standards and assessments, data-driven instruction, and a new teacher and leader effectiveness system. The agenda has been bolstered by a Race to the Top grant and the philanthropically supported Regents Research Fund, a 501(c)(3) organization that provides additional capacity for research and planning at the state level. In February 2014, the Board of Regents adopted a comprehensive suite of workgroup recommendations designed to adjust implementation of the CCLS. Recommendations included providing more support for parents and teachers, improving public trust in CCLS implementation, limiting unnecessary testing, and protecting student data privacy. Additionally, in March 2014, a state Common Core Implementation Panel, made up of New York parents, educators, legislators, business and community leaders, and national experts, reviewed implementation of the standards and submitted to the governor recommendations to ensure their success.

Annual assessments for ELA and math:

- New York has ELA and math assessments for grades three through eight that the New York State Education Department reported were fully aligned to the new standards in 2012-13, and high school Regents Exams for English and Algebra I Regents Exams that were aligned in 2013-14. New York is in the midst of aligning additional Regents Exams: geometry in 2014-15 and Algebra II in 2015-16.
- The state participated in the PARCC field testing in 2013-14 and is scheduled to do so again in 2014-15. The decision to adopt new assessments for 2015-16 and beyond is yet to be made.

Professional learning and support for implementation:

- The department created Network Teams of educators and experts to provide districts and schools with professional learning and to support implementation planning, local curriculum development and integration of the CCLS with other reform initiatives.
- Regional Boards of Cooperate Educational Services (BOCES) have also collaborated with districts to select teacher and principal Common Core Ambassadors. Ambassadors help to disseminate information about the standards and build the capacity of local colleagues.
- In 2015, the department plans to coordinate Common Core Institutes, in which educators from districts, BOCES, and charter schools serve as full-time Common Core Institute Fellows. The fellows will support local capacity-building and help to develop additional online instructional materials for 2015-16.

- Additionally, the department's EngageNY website (http://www.engageny.org/) provides an extensive array of instructional tools to help educators implement the new standards. EngageNY has become a popular resource for other state departments of education and teachers across the nation.

Reaching diverse learners:

- To support students with the most significant cognitive disabilities, New York has alternate standards and assessments in place that the department reported are aligned to the CCLS. New York is a member of NCSC and plans to decide by 2014-15 whether to continue to use its own standards and assessments or adopt those of NCSC.
- To support English learners in their efforts to master the linguistic demands inherent in the CCLS, New York has developed ELP standards that it reports are aligned to the CCLS, and the state is working to fully align its ELP assessment by 2015-16.
- To address the needs of English learners in bilingual settings, the department is developing Home Language Arts Progressions (HLAP) through its Bilingual Common Core Initiative. The HLAP is a set of CCLS-aligned standards for ELA in bilingual classrooms pre-K-12. The department is also developing instructional resources to complement the HLAP in the five most common native languages in the state.
- Additionally, in 2014 the department released a Blueprint for English Language Learners (ELLs) Success. The Blueprint is a statewide framework of eight guiding principles to support administrators, policy-makers and practitioners as they prepare English learners for college and career readiness.

Aligned Teaching Resources

How have state departments of education facilitated local educators' use of teaching materials that are aligned to the states' new college- and career-readiness standards? Many interviewees shared that student textbooks that are aligned to the new standards are unavailable, leaving teachers to find their own resources and materials for everyday teaching. Hence, they said, the supplementary resources and materials that departments have made available for on-demand, voluntary use provide teachers with valuable supports.

What does it mean for instructional resources and materials to be aligned to the new standards? Guidance materials and planning tools for teachers need to provide coherent and accurate information about the standards, clearly articulating the knowledge and skills contained within the standards and how these differ from the states' previous standards. Sample instructional plans need to model how to design teaching and learning experiences that reach the increased levels of rigor required by the new standards.

Overview of SREB's Look at State Efforts

SREB researchers reviewed the following aspects of states' efforts to provide educators with access to online, on-demand, supplementary tools to support the teaching of the new standards.

- *Location:* Where can educators go to access these tools?
- *What is Available:* What tools has the department made available?
- *Development Process:* How has the department developed or acquired these tools?
- *Ensuring Alignment:* How has the department ensured that these tools are aligned to the state's new standards and of high quality?
- *Empowering Educators:* How has the department supported educators in developing and selecting their own high quality, aligned materials?

Leading State Efforts

All 14 states in this study have fostered local use of high-quality instructional resources and materials that are aligned to the states' new standards. Leading states are Colorado, Georgia, Louisiana, Maryland and New York.

Leading states stood out according to the following criteria.

Aligned Teaching Resources

All 14 states fostered the use of high-quality instructional resources and materials that are aligned to new college- and career-readiness standards. ***Leading states,*** those with the most comprehensive array of tools and the most extensive efforts to empower educators to select and design their own resources, are Colorado, Georgia, Louisiana, Maryland and New York.

- *Extensive Resources:* The state department of education has provided educators with access to an extensive set of instructional resources and materials that the department vetted for quality and alignment to the new standards. These resources and materials include the following:
  - Tools for the content areas of ELA and math in K-12, as well as for the literacy standards in history/social studies, science, and technical subjects in grades six through 12

- A wide variety of resources such as guidance materials, curriculum development tools, sample instructional plans, strategies for differentiating instruction for diverse learners, formative assessment tools, videos of high-quality instruction and samples of student work
- The most comprehensive sets of sample instructional plans include lesson and/or unit plans that address all of the standards for a school year (providing "a year at a glance") in ELA and math for all grades K-12, and some sample plans for the literacy standards in grades six through 12

- *Formal Vetting Process and Criteria:* The state department of education established rigorous criteria and an explicit and systematic vetting process for determining the quality and extent of alignment of the resources it provides.
- *Empowered Educators:* The department has also provided extensive training and support for educators to learn how to design and select their own high-quality, aligned teaching tools.

Starting Point: States' Newest Work in This Area

Although most of the states have built extensive sets of aligned teaching resources for educators, they are not resting. In 2014 alone, most added significant quantities of new resources to their repositories. The work described below includes these 2014 additions:

- *Seven states* added additional information about the standards and planning guidance materials for educators.
- *Seven states* added sample instructional plans for ELA and math K-12.
- *Eight states* added sample instructional plans for the literacy standards in history/social studies, science, and technical subjects grades six through 12.
- *Nine states* added formative assessment tools.
- *Ten states* added videos showing exemplary teaching and learning in practice.
- *Two states* added samples of student work based on the new standards.

For a detailed profile of each of the 14 states' efforts in this area between 2010 and summer 2014, see the accompanying topic-specific report in this series on *Aligned Teaching Resources*.

Trends Across the States: Resources and Materials Offered

Location of the state-provided resources and materials

To meet educator needs for access to online, on-demand, aligned instructional resources and materials, each state has either a dedicated website or pages on the state department of education's website housing their offerings. A few of the states have also used wikis as an additional mode of sharing.

Types of aligned resources and materials

All 14 states in this study have provided the following types of tools, to varying degrees: information about the standards and explanations of the instructional shifts required to meet the standards, guidance for

designing curriculum and planning for instruction, sample instructional plans such as model lessons or units, and information about assessment. **Notable examples are as follows.**

- *Information about the Standards and Planning Guidance:* Seven states — Delaware, Kentucky, Louisiana, Maryland, Mississippi, New York and Tennessee — provide extensive resources for educators and parents, such as toolkits, guidebooks, curriculum frameworks and communication tools.
- *Sample Instructional Plans for ELA and Math K-12:* The five leading states (Colorado, Georgia, Louisiana, Maryland and New York) offer sample instructional plans that address all of the standards for an entire school year for all grade levels K-12 in ELA and math. These plans and accompanying resources include not just instructional strategies and activities but also techniques for differentiating instruction for diverse learners, formative assessment tasks, and other classroom resources.
- *Sample Instructional Plans and Other Tools for Teaching the Literacy Standards in History/Social Studies, Science, and Technical Subjects in Grades Six through 12:* Four states (Colorado, Georgia, Maryland and North Carolina) offer extensive sets of sample instructional plans and resources for these subjects.
- *Resources to Help Teachers Differentiate Instruction for Diverse Learners:* Maryland and New York have the most robust set of resources for helping teachers address the particular strengths and needs of bilingual students, English learners, students with disabilities, advanced learners and struggling learners.
- *Formative Assessment:* In addition to furnishing model formative assessment items and other tools, which most of the states do, Georgia and North Carolina each offer a series of online professional learning modules to help teachers learn how to use the state-provided resources and how to employ formative assessment practices in their classrooms.
- *Models of Teaching and Learning in Action:*
  - Four states offer extensive libraries of videos showing exemplary teaching and learning in classrooms — Georgia, Kentucky, Louisiana and New York.
  - Three states offer samples of student work resulting from instruction on the new standards — Kentucky, Louisiana and New York.

Acquiring these aligned instructional resources and materials

Thirteen of the states have developed their own resources and materials, often in conjunction with local educators, partners and vendors. By contrast, in Colorado, the state Department of Education has acted as a convener, providing guidance, professional learning and facilitation for local educators to develop resources and materials; selected materials from this process have been then posted in the state archive. **Notable aspects of this work are as follows.**

- *Involving Educators:* Four states have involved educators heavily in their resource development and vetting processes — Colorado, Louisiana, Maryland and Tennessee.
- *Partners and Vendors:* Most of the departments have worked with partners and vendors to develop or obtain some resources. Typical partners with states are regional education service agencies, the Literacy Design Collaborative (LDC) and Mathematics Design Collaborative (MDC), higher education

representatives, the PARCC or Smarter Balanced consortium, Achieve, SEDL, Student Achievement Partners, and public broadcasting. While states as a whole have worked with many vendors, the two most common are Thinkfinity and Pearson.

Trends Across the States: Ensuring Alignment

All of the states in this study have either established a formal process for vetting instructional resources and materials they make available or, in the case of Mississippi, are in the midst of developing one. **Notable aspects of these processes are as follows.**

- *Robust Vetting Processes:* In the four states with the most robust vetting processes — Kentucky, Louisiana, North Carolina and Pennsylvania — the department established rigorous review criteria and explicit guidance for reviewers (for example, Pennsylvania's Quality Review Process handbook). The department also established a multistep process involving reviewers from the school to the state level (for example, Kentucky's and North Carolina's multistage reviews and Louisiana's involvement of thousands of Teacher Leaders). In Kentucky, North Carolina and Pennsylvania the vetting process is conducted entirely through the states' online instructional improvement systems.

- *Explicit Alignment Criteria:* States took one of two approaches, listed below, to establish the criteria they use to gauge the extent of alignment and quality of possible materials for posting. (While they may have used multiple criteria, the primary criteria states reported are indicated below.)

  - Eight states elected to use the EQuIP/Tri-State Rubrics, developed by Massachusetts, New York, Rhode Island and Achieve: Alabama, Colorado, Delaware, Georgia, Maryland, New York, North Carolina and West Virginia.

  - Six states developed their own criteria or adapted criteria from other publicly available tools such as the Instructional Materials Evaluation Tool (IMET, from Student Achievement Partners) and the Publishers' Criteria for the Common Core State Standards (developed by the lead authors of the Common Core): Kentucky, Louisiana, Mississippi, Pennsylvania, South Carolina and Tennessee.

Aligning textbooks

Most state departments of education play modest roles in the review and adoption process for textbooks and other instructional materials that are selected at the local level; in a few states the department has no role. In many states, a state-level panel reviews products submitted by vendors and produces a list of recommended or approved products, although districts may purchase materials whether or not they are on a state list.

- In nine states (Delaware, Georgia, Louisiana, Maryland, Mississippi, North Carolina, South Carolina, Tennessee and West Virginia), the department furnished the state-level review panel and/or district decision-makers with tools to help them gauge the extent of alignment of products to the new standards. These tools included the Publishers' Criteria for the Common Core State Standards, the EQuIP/Tri-State Rubrics and/or the IMET.

- Louisiana's state Department of Education has a notable process in place to support the local selection of aligned textbooks. In 2013-14 the department developed an informal rolling review process to broaden the set of resources reviewed and to provide ongoing guidance as new materials

are submitted. Reviews result in three-tiered ratings of the products, from full Common Core alignment to partial alignment to a lack of any quality alignment (see http://www.louisianabelieves.com/academics/instructional-materials-review/curricular-resources-annotated-reviews).

Trends Across the States: Empowering Educators

All of the 14 states in this study have offered at least some professional learning for educators on how to select and design their own high-quality, aligned teaching tools. In most states, the department has trained district and/or school leadership teams who then work directly with teachers. In addition, most of the states have also offered some type of training directly to teachers, for example through summer academies. **Notable aspects of this work are as follows.**

- *Most Extensive Training and Support:* Five states — Alabama, Georgia, Kentucky, North Carolina and Tennessee — have offered the most extensive training, reaching large numbers of practitioners across the state.
- *Frameworks for Training:* Most states use the EQuIP/Tri-State Rubrics as a basis for this training. Six states — Colorado, Delaware, Georgia, Kentucky, Pennsylvania and West Virginia — use the LDC/MDC frameworks.

Highlights From Three Leading States

Colorado

To foster local use of instructional resources and materials that are aligned to the state's new Colorado Academic Standards (CAS), the state Department of Education acts as a catalyst for local development. The department convenes local educators and provides guidance, professional learning, and facilitation. The department has posted resources and materials developed by participating educators in archives available to educators statewide. See the department's website for standards and instructional support (http://www.cde.state.co.us/standardsandinstruction) and the eNetLearning website (http://www.enetlearning.org/).

The department has three major initiatives to accomplish this work:

- The District Sample Curriculum Project was designed to generate a statewide resource bank of CAS-aligned instructional resources and materials. In 2012-13, more than 500 educators participated voluntarily in the department's professional learning on the new standards and training on how to develop aligned instructional unit plans. These educators developed more than 700 sample unit overviews for math, ELA and literacy in history/social studies, science, and technical subjects (and other content areas). The overviews provide teachers with "a year at a glance" with all of the standards incorporated. During 2013-14, educators from 116 districts developed more than 100 full instructional units based on the unit overviews, with at least one full unit for each grade and content area K-12. Each unit includes approaches to teaching and learning, strategies for differentiating instruction, and suggested classroom resources and formative assessment tasks. The EQuIP/Tri-State Rubrics, as well as other resources, were used to ensure the alignment of the materials.
- The Content Collaboratives project focuses on building a statewide resource bank of high-quality assessment tools aligned to the CAS and building teachers' assessment literacy. In 2012, the department convened volunteer K-12 educators along with assessment experts. Participants reviewed

available assessments from vendors, districts, and other sources, and identified those that exemplify high quality and alignment to the standards. So far, more than 300 have been loaded into the department's online assessment bank. Next, the department collaborated with the Center for Educational Testing and Evaluation of the University of Kansas to train the teachers on how to develop their own CAS-aligned performance assessments. Finally, beginning in 2014, the department worked to integrate this assessment work with the continuing work of the District Sample Curriculum Project. Members of the Content Collaboratives initiative lend assessment expertise to the design of performance assessments embedded in the instructional units, and they develop assessment literacy tools.

- The LDC/MDC project focuses efforts at the district level. The department, the Colorado Education Initiative and the Bill & Melinda Gates Foundation have together sponsored the participation of 13 districts. The goal is to support teachers in developing rigorous, standards-aligned learning experiences that integrate literacy skills throughout the academic disciplines and that increase student achievement in math. The department and its partners currently are developing plans for scaling this project across the state.

Louisiana

To foster local use of instructional resources and materials that are aligned to Common Core, the state Department of Education has provided educators with extensive resources on its online Teacher Support Toolbox (see http://www.louisianabelieves.com/resources/classroom-support-toolbox/teacher-support-toolbox; see also the department's Academics Web page at http://www.louisianabelieves.com/academics/2014-2015-curricular-package). The department also works to build educator capacity through its Teacher Leaders Cadre initiative.

- The department collaborates with a committee of 60 Teacher Leader Advisors from across the state to create and vet materials for the department's online Teacher Support Toolbox. These resources include model scope and sequence documents for ELA and math that cover an entire year of instruction for every grade pre-K-12. The department provides instructional guidebooks by grade level, with illustrations of effective Common Core instruction and model instructional unit plans. Guidebooks also include remediation strategies for every standard to support teachers of diverse learners. The department also provides an online formative assessment item bank with items for grades one through 11, aligned samples of student work, and videos of exemplary instruction that were developed in partnership with the Teaching Channel. To select materials from external sources (for example, vendors), the department reviews the materials using rubrics adapted from the IMET.

- The department launched its Teacher Leader Cadre initiative in 2013. This cadre initially included one or two teachers from every school in the state, approximately 2,000 in total. In 2013-14 the size of the group doubled, and in summer 2014 the department provided more than 6,500 seats for Teacher Leaders. In collaboration with Teacher Leader Advisors, the department provides the Teacher Leader Cadre with intensive professional learning on assessing alignment of materials and developing aligned lessons and units of study. Teacher Leaders then work with peers in their schools to build local capacity to design and select high-quality curricular resources.

- Louisiana also has a notable process in place to support the selection of aligned textbooks. In 2013-14 the department developed an informal, rolling review process to provide ongoing guidance to local decision makers (see http://www.louisianabelieves.com/academics/2013-2014-math-and-english-language-arts-instructional-materials-review).

Maryland

To foster the use of instructional resources and materials that are aligned to Maryland's College and Career-Ready Standards, the Maryland State Department of Education provided educators access to extensive resources through the department's online Curriculum Management System within its Blackboard Learn website (https://msde.blackboard.com) and School Improvement website (http://mdk12.org/index.html). The department also provided extensive training to build educator capacity to select and design their own high-quality, aligned materials.

- To develop, acquire and vet materials for posting, the department collaborated with educators from across the state and various partners, including content-area experts, higher education institutions, Maryland Public Television, and the Maryland Business Roundtable. The department worked with local district leaders to select teachers to write the Maryland College and Career-Ready Curriculum Frameworks, which identify essential skills and knowledge for K-12 in math, ELA, and literacy in social studies, science, and technical subjects. These writers used the EQuIP/Tri-State Rubrics as a guide during development. Department staff, educators, higher education colleagues — including experts on English learners and students with disabilities — plus colleagues from other states and Achieve, provided feedback on drafts.

- To complement the frameworks, the department is developing an extensive Online Instructional Toolkit that, when complete, will include model unit and lesson plans and assessment resources for every standard in pre-K-12 in math, ELA, and literacy in social studies, science, and technical subjects. All of the instructional plans included in the toolkits incorporate strategies for differentiating instruction for diverse learners. The department also makes available 250 intervention modules for ELA and math. The department provides videos of exemplary instruction for ELA, math and STEM, with videos for disciplinary literacy under development, and is developing formative and interim assessment tools.

- To build educator capacity to create and select their own high-quality, aligned resources and materials, the department provided Educator Effectiveness Academies each summer, 2011 to 2013, with follow-up during the school years. Leadership teams from every school in the state received intensive professional learning on using the EQuIP/Tri-State Rubrics to develop aligned instructional plans, and on using the aligned materials provided by the department. Participants were encouraged to use this training to lead curriculum development and alignment work within their schools and districts. The department has also provided teacher trainings on the EQuIP Student Work Protocol, a protocol for collaborative examination of student work.

Professional Development

What professional learning opportunities have state departments of education provided to help educators prepare for and implement their states' new college- and career-readiness standards?

Overview of SREB's Look at State Efforts

SREB researchers reviewed the major initiatives each state put in place to provide teachers and leaders with training and support on the state's new standards. The goal of this review was to gain an overall understanding — not an exhaustive list — of states' approaches to providing professional learning for local educators.
SREB researchers reviewed the following aspects of states' professional learning efforts.

- *Overall Approach and Rationale:* How did the department structure its major professional development initiatives to help educators prepare for and implement the new standards and assessments?
- *Major Professional Learning Initiatives:* What major initiatives did the department undertake to provide training and support to educators?
- *Tailored Professional Development for Leaders:* What major initiatives did the department undertake to provide role-specific support for principals and district staff?
- *Online and On-Demand Professional Development:* In addition to the general professional development above, what supplemental online, on-demand tools did the department provide educators to address their particular needs?

Leading State Efforts

All 14 states provided some initial training for educators, and they all offer at least some ongoing support. *Leading states,* those with the most comprehensive and coordinated efforts, are Delaware, Georgia, Kentucky, Louisiana, Maryland and Tennessee.

Leading states stood out according to the following criteria.

Professional Development

All 14 states provided some sort of initial training for district leadership teams and they all offer at least some ongoing support for teachers and leaders. ***Leading states,*** those with the most comprehensive and coordinated, ongoing efforts, are Delaware, Georgia, Kentucky, Louisiana, Maryland and Tennessee.

- *Initial and Ongoing Structures:* The department provided or collaborated with entities such as regional education service centers to provide initial training on the new standards; it continues to provide ongoing support to foster successful, long-term implementation. This includes the following.
  - Collaboration with local educators that is systematic and intensive, whether through work with school leadership teams or by integrating support structures for practitioners and leaders in key role groups such as school and district leaders, content-area teachers and higher education faculty
  - Professional learning for teachers on an individual basis, in addition to that provided via trainings for school or district teams, in which a large number of teachers across the state have participated
  - Substantial, targeted professional learning for principals and district staff

- *Comprehensive Content:* The professional learning content includes the following.
  - ELA and math for K-12
  - Literacy in history/social studies, science, and technical subjects in grades six through 12
  - Differentiation of instruction for diverse learners
  - Formative assessment
  - Understanding how the new standards relate to other major reforms
- *Supplementary Online Support:* The department has also provided extensive supplementary online professional learning resources for educators to access on demand, to support their particular needs.

Starting Point: States' Newest Work in This Area

The work described below includes these developments, all in 2014:

- Five states launched major new professional development initiatives or extensions of existing ones.
  - In Delaware, the state Department of Education designed its Common Ground for the Common Core initiative to provide intensive training and implementation support directly to schools and districts. The initiative began in 2013 as an 18-month project. Schools and districts participated voluntarily and each designated a guiding team of teachers and administrators. Teams participated with the department in several full-day and multi-day professional learning institutes throughout the year, as well as monthly follow-up meetings to discuss their progress. In 2014-15, the department launched Common Ground for the Common Core 2.0 to deepen the focus on key practices for successful implementation. The department continues to offer the institutes and monthly follow-up meetings, and liaisons at the department work with the teams to maintain communication and provide feedback on the work at the teams' local sites.
  - In Louisiana, the state Department of Education expanded its Teacher Leaders initiative in an effort to scale the initiative statewide. The department offered over 6,500 teachers representing schools across the entire state opportunities for intensive training, support and collaboration to facilitate their learning about and implementation of the Common Core. Teacher Leaders work with peers at their local sites to build capacity to implement the standards.
  - In Maryland, to extend the professional learning offered through the State Department of Education's Educator Effectiveness Academies (EEAs) that provided training and support to all schools in the state between 2011 and 2013, the department offered professional learning at eight summer conferences hosted on college and university campuses. The conferences were open to all educators across the state. Content was based upon learnings from visits department staff made to all districts in the state during 2013-14. The department trained 200 Master Teachers from across the state to deliver the content. The department also posted all EEA resources online for on-demand access and is developing new courses that schools can use as needed for their local context.
  - In Mississippi, the state Board of Education approved a contract funding additional staff at the state's six regional education service agencies. This additional staff will help to provide enhanced professional learning services and instructional resources to districts, schools and teachers.

- In Tennessee, the state Department of Education launched a STEM Leadership Council, consisting of individuals from industry, higher education and K-12. The council is responsible for developing and facilitating STEM professional development across the state, and will also provide guidance and feedback to the department on its STEM-related initiatives.

- Most of the states added online professional development resources to their existing archives.
- Now four years into the work of supporting local implementation of the standards, states grapple with how to shape their future initiatives to foster success over the long term.

For a detailed profile of each of the 14 states' efforts in this area between 2010 and summer 2014, see the accompanying topic-specific report in this series on *Professional Development*.

Trends Across the States: Professional Learning for Educators

State approaches to professional development

All of the states designed their professional development initiatives to **build local capacity to lead implementation**. Several also structured their offerings to **maximize the impact of the small staff at the department**. States' efforts varied greatly, however, in how deeply they reached into the field — how systematically the departments worked with districts, schools and teachers — and how extensively the departments facilitated collaboration across levels of the system to integrate the work of the state, regional entities, districts, schools and teachers. Interviewees from several of the departments shared that since adopting the state's new standards, they have been providing more professional learning and engaging with local educators more intensively than ever before — in response to unprecedented requests for support from the field.

Most of the states had **special funding** to bolster their early initiatives. All of the leading states won Race to the Top grants. A few also received grants from private foundations. Interviewees in these states shared that these grants, while only part of their overall funding stream for professional learning, were a critical factor in enabling them to offer the extent of training and support that they have in recent years.

Major professional development initiatives

Whether they designed and delivered professional learning themselves or in partnership with entities such as regional centers, all 14 state departments of education provided initial training to help local educators learn about the new standards and prepare for implementation. They also provide ongoing training and support of various types to help educators be successful over the long haul. **All 14 states had some sort of training for *district* leadership teams**, who were then responsible for training their colleagues and leading implementation. Some states, after an initial emphasis on work with district teams, added a focus on direct training for teachers and leaders in order to foster change as close to the classroom as possible. **In addition to work with district teams, notable aspects of states' initiatives are as follows.**

- *Work at the School Level:* While several of the states offered some type of training for school leadership teams, Delaware, Maryland and Tennessee had deep work with school teams at the heart of their professional development efforts.
- *Work at the Teacher Level:* While all the states offered some type of training directly to teachers, state departments with the most extensive offerings for teachers were Georgia, Louisiana, Mississippi and Tennessee. For example, through its Teacher Leader Cadre initiative, Louisiana has offered training to

approximately 6,500 teachers so far, to serve as leaders and trainers at their home schools. Through its Core Coaches initiative, Tennessee has trained more than 1,300 teachers to lead statewide trainings that have reached approximately 55,000 participants (though this number includes some who attended multiple trainings).

- *Fostering Collaboration Across Role Groups and Levels of the System:* Georgia, Louisiana, Pennsylvania and Tennessee have made notable efforts to promote collaboration across role groups and levels of the system, for example, department staff working with combinations of regional staff, higher education colleagues, district leaders, school leaders, teachers and external partners. Alabama, Kentucky and Mississippi stand out for taking this collaboration further:

  - In Alabama, in 2012 the State Department of Education created a structure of interlocking district implementation and regional planning teams. Districts create leadership teams that include administrators and teachers of several different subject areas. Districts participate voluntarily, with every district in the state taking part. These teams participate in quarterly professional learning meetings with the department and then lead the professional learning for schools in their districts. To supplement the quarterly meetings and help the district teams deliver local professional learning, regional planning teams made up of leaders from the state's 11 regional in-service centers, the Alabama Math, Science and Technology Initiative (AMSTI) and the Alabama Reading Initiative (ARI) programs, institutions of higher education, early childhood education, and career and technical education meet quarterly with the department to design tailored, ongoing training and support. Nearly 300 regional AMSTI, ARI and other content specialists across the state then provide this ongoing training and support to districts and schools. This initiative continues in 2014-15 and the department reports plans for future years.

  - In Kentucky, the state Department of Education's District Leadership Teams initiative built a structure of interlocking leadership networks to provide practitioners from a variety of role groups with job-specific support networks. For details, see the Kentucky *Highlight* above in the section on *Timeline and Approach to Standards and Assessments*.

  - In 2014, Mississippi increased the professional learning resources available to local educators, through an initiative resulting from collaboration between the Legislature, the state Board of Education, the state Department of Education, districts and regional centers. In January the state's Joint Legislative Committee on Performance Evaluation and Expenditure Review (PEER) submitted a report to the Legislature outlining, among other things, the reasons behind and process for the state's adoption of the Common Core and the department's implementation efforts. Based on the PEER report and with input from districts, in spring 2014 the board approved funding for additional staff at the state's six Regional Education Service Agencies (RESAs). In 2014-15 the RESAs provide enhanced training and tools to districts, schools and teachers in the areas of ELA, literacy, math, special education and early childhood education, with a goal of reaching the majority of the state's approximately 34,000 educators.

- *Literacy Design Collaborative and Mathematics Design Collaborative Initiatives:* Six states have LDC/MDC initiatives. In Delaware the state Department of Education has trained secondary teachers and Reading and Math Cadre members (district content area specialists) on using LDC tools to create tasks that embed reading, writing and literacy in the content areas. Georgia and Kentucky have trained teachers, leaders and others in the majority of their districts. Colorado provides training to targeted districts, with plans for scaling the work statewide. (See a description of this work in the Col-

orado *Highlight* in the section above on *Aligned Teaching Resources*). Also, in 2013 Colorado and Kentucky partnered on the Common Assignment Study initiative. High-performing teachers from both states meet to collaborate on units of study that align to both the KCAS and the CAS, that embed LDC and MDC modules and that provide models for teachers in both states. The partner states plan to expand the work to include more teachers from additional districts in 2014-15, and have developed criteria and guidance to support scaling this work. In Pennsylvania, Intermediate Units (regional education service agencies) have provided districts with LDC training since 2010-11, and MDC training since 2013-14. The state Department of Education uploads instructional resources developed through this work into its online resource bank for use by teachers statewide. In West Virginia the state Department of Education includes LDC/MDC in its training modules designed for RESAs to use in their work with local districts across the state.

Sustainability

Four years into the work of helping schools, districts and teachers learn about and prepare to implement new college- and career-readiness standards, states grapple with the issue of sustainability. State leaders must determine how to carry their professional learning initiatives forward, and/or whether to develop new approaches to foster continued progress. Complicating matters is the fact that states have tight education budgets and the 10 states that received Race to the Top grants now face the end of that funding. While planning is in various stages across the states, interviewees from state departments of education shared possible approaches that fell into one of two categories: scaling back or expanding.

- *Scaling Back:* Interviewees in several of the states shared that the state department plans to continue its current initiatives in a modified, scaled-back version. Some possible modifications are to transition from face-to-face trainings to online, on-demand tools and to shift responsibility for providing support from the state to districts and schools.

- *Expanding or Adding:* Interviewees in some of the states shared that the state department plans to modify and expand its initiatives in 2014-15 and beyond.

  - In Delaware in 2014-15, the state Department of Education extended its Common Ground for the Common Core initiative, which was initially planned as an 18-month initiative to end in 2014. The department will continue its face-to-face professional learning institutes and its monthly follow-up meetings with guiding teams from schools and districts. Department liaisons will also work directly with the teams to monitor local progress and support local Professional Learning Communities.

  - In Maryland, after providing Educator Effectiveness Academies (EEAs) for teams representing every school in the state between 2011 and 2013, in 2014 the State Department of Education worked with 200 Master Teachers to deliver professional learning at summer conferences for educators. The department also posted all EEA resources online for on-demand access and is developing new courses that schools can use as needed for their local context. See a description of this work above in the section, *Starting Point: States' Newest Work in This Area*.

  - In Mississippi, in spring 2014, the state Board of Education approved funding for additional professional development staff at the state's RESAs. See a description of this effort above in the section on *Fostering Collaboration Across Role Groups and Levels of the System*.

  - In Tennessee, in spring 2014 the state Department of Education launched a STEM Leadership Council to develop and facilitate STEM-based professional development across the state. See a description of this work above in the section, *Starting Point: States' Newest Work in This Area*.

Trends Across the States: Professional Learning for Leaders

State departments of education in all 14 states have offered some sort of professional development aimed specifically at increasing the capacity of district staff and principals to lead local implementation. **However, professional learning and support for leaders has not been as intensive as what departments have provided teachers.** Most commonly, state departments of education have offered breakout sessions or a special track for leaders at the statewide summer trainings for district teams, or they have added the topic of the new standards to the departments' regular leadership training. Seven states have had more extensive professional learning for leaders: Delaware, Kentucky, Louisiana, Maryland, Pennsylvania, South Carolina and Tennessee. **Highlights from three of these states with more extensive efforts are as follows.**

- In Delaware, in addition to the role-specific training that school and district leaders receive through the state Department of Education's Common Ground for the Common Core initiative, approximately 100 principals statewide participate in job-embedded coaching programs. The department provides these coaches in collaboration with partners such as the Delaware Business Roundtable Education Committee, the Rodel Foundation, and the University of Delaware. Additionally, the department currently is planning a new statewide professional learning initiative for leaders.

- In Maryland, from 2011 through 2013 the State Department of Education provided role-specific training to principals from every school in the state during its annual Educator Effectiveness Academies (EEAs). In addition, the department meets monthly with district assistant superintendents, and less frequently with an Executive Officer Network, composed of district leaders who supervise principals. In 2013-14, the department visited every district, meeting with leaders and visiting classrooms to learn about implementation progress and needs. Based on these visits, the department designed sessions for its 2014 summer conferences, and paired leaders in small districts with those in larger districts to facilitate sharing and collaboration. The department also provides job-embedded support for principals in the state's lowest-performing districts and Title I schools through the Maryland Breakthrough Center.

- Through Tennessee's TNCore Summer Trainings in 2012-2014, school and district leaders received role-specific professional learning. Additionally, the state Department of Education provides a regional Common Core Leadership Course to support school and district leaders in understanding and implementing the standards and observing instruction. Across 2013 and 2014, approximately 5,000 administrators participated. In 2014, the department began offering advanced courses for administrators with experience in Common Core implementation.

Professional Learning for Leaders

All 14 states have provided some sort of professional development specifically for district staff and principals, although these initiatives have not been as intensive as those provided for teachers. Seven states with more extensive support for leaders are Delaware, Kentucky, Louisiana, Maryland, Pennsylvania, South Carolina and Tennessee.

Trends Across the States: Supplementary Online Professional Learning Resources

All of the 14 states offer educators access to online, on-demand, supplementary professional development resources. These resources can not only help educators prepare to teach their states' new standards but also support their overall, long-term professional growth. Most of the states offer combinations of information and guidance, tools, courses and self-paced modules, and videos of exemplary instruction in action. These include many of the resources and materials described in the section above on *Aligned Teaching Resources*.

Highlights From Two Leading States

Delaware

Delaware's professional learning on the Common Core stands out due to the extensive nature of collaboration between the state Department of Education and leadership teams at both the school and district levels, and training and support for leaders.

Professional learning for school and district teams:

- Following some initial training for educators around the state, the department worked with a steering committee of stakeholders including the state Board of Education, the teachers union, and higher education to design the Common Ground for the Common Core initiative. The initiative began in 2013.
- Schools and districts each designate a guiding team of teachers and administrators to participate in several full-day and multi-day professional learning institutes throughout the year. Teams from 143 traditional schools and a few charter schools have so far participated voluntarily, representing 17 of the state's 19 districts. These institutes include learning about the Common Core, developing implementation plans and strategies to evaluate implementation. The department works with partners including Achieve, Student Achievement Partners, the International Reading Association, Solution Tree and Expeditionary Learning to design and deliver the institutes.
- The department complements the institutes with face-to-face, monthly meetings with the guiding teams. During these meetings, the department offers additional training and feedback. Guiding teams discuss their progress and identify areas of strength and areas for improvement.
- In 2014-15, the department launched Common Ground for the Common Core 2.0, extending the project and adding a focus on assessment, performance tasks, Professional Learning Communities, and response to intervention practices.

Professional learning for leaders:

- Principals: The department works with partners such as the Delaware Business Roundtable Education Committee, the Rodel Foundation and the University of Delaware on four job-embedded coaching projects. More than 100 principals work with a coach to develop their knowledge of the Common Core and their skills in instructional leadership, change management, and implementing the state's new teacher evaluation system. The department is also currently planning an additional statewide initiative to support principals.

- District staff: The department provides professional learning at the district level through Math and Reading Cadres. ELA and math content specialists from all Delaware districts collaborate monthly with the department to receive professional learning and to plan and develop supports for practitioners. Cadre members serve as instructional leaders in their home districts.

Sustainability:

- Much of the work is supported by the state's Race to the Top grant, which will continue to be in place through 2014-15.
- To sustain efforts beyond the grant, the department plans to engage with the U.S. Department of Education Reform Support Network's Sustainability Workgroup and to cement reform efforts by institutionalizing Professional Learning Communities in schools statewide.

Tennessee

Tennessee's approach to professional learning stands out due to the extensive involvement of local educators in planning and providing the training, and the large numbers of practitioners who have participated.

Common Core Leadership Council:

- In 2012 the state Department of Education launched a Common Core Leadership Council. The council is made up of principals, supervisors and superintendents — 22 members represented all regions in the state in 2013-14. The council advises the department on all aspects of the implementation of the new standards and assessments.
- Approximately every two months, department staff members consult with the council to discuss ongoing professional learning and local implementation efforts and to track progress and address challenges.

Professional learning for school teams and district staff:

- Following some initial training for educators around the state, the TNCore initiative began in 2012 and continued through summer 2014. TNCore provided local educators and leaders with professional development and support to lead implementation at their home sites. The department recruited 1,370 local educators to serve as Core Coaches. To prepare for delivering the TNCore training to educators around the state, Core Coaches received intensive training and support from the department and experts, with partners such as the University of Pittsburgh's Institute for Learning, Sopris Learning, and others.
- TNCore training consisted of regional multi-day summer sessions for school teams and district staff. Teachers participated in specific learning tracks by grade level and subject. In addition to the summer sessions, school teams and district staff participated in follow-up sessions throughout the school year. In 2013, the department also invited higher education faculty members to attend sessions specifically designed for them. By the last session in summer 2014, approximately 55,000 participants had attended TNCore trainings (this number includes some who attended multiple trainings). The department currently is exploring options for continuing this initiative, as the state's Race to the Top grant funding for most projects ended in 2014.
- Additionally, in fall 2013 the department launched a year-long Common Core Reading Course for teachers. Over 5,000 teachers participated in 2013-14 and the course continues in 2014-15. And in

spring 2014, the department launched a STEM Leadership Council, consisting of individuals from industry, higher education and K-12, responsible for developing and facilitating STEM trainings and professional development across the state.

Professional development for leaders:

- The department also offers a Common Core Leadership Course specifically for principals, assistant principals and district supervisors. Local administrators receive training to serve as Common Core Leadership Coaches, delivering six full days of trainings during the school year. Approximately 70 percent of school-level administrators in the state have taken the course.
- In 2014 the department began offering advanced courses, to differentiate learning for more experienced leaders.

Online resources:

- Tennessee also offers educators an extensive array of online professional learning resources for use on a voluntary, on-demand basis through its Electronic Learning Center (http://www.tnelc.org/) and its TNCore Web portal (http://www.tncore.org/).

Evaluation of Teachers and Leaders

How do states' new teacher and leader evaluation systems integrate the higher expectations for student learning inherent in their new college- and career-readiness standards within the systems' requirements for continuous improvement of teachers and principals? Alignment between the feedback teachers and principals receive about their performance and learning expectations for students is crucial to ensure that educators focus on the kinds of work deemed most essential for improving student learning.

Overview of SREB's Look at State Efforts

SREB researchers reviewed the following information about each state's teacher and leader evaluation systems.

- *Basic Information about the Systems:* When were the state's new or revised teacher and leader evaluation systems put into place?
- *Professional Teaching and Leadership Standards:* Has the state updated its professional teaching standards and leadership standards to articulate the new knowledge and competencies needed in the context of the state's new college- and career-readiness standards?
- *Components of the Systems and Their Alignment to the New College- and Career-Readiness Standards:* How do the measures within the systems produce information about practitioners' competencies and accomplishments in teaching and in leading implementation of the new college- and career-readiness standards?
- *Use of Evaluation Data for Continuous Improvement:* How are the results of the evaluation process used to assist practitioners, systems, and the state in strengthening teaching and leadership of the new college- and career-readiness standards?

Leading State Efforts

As of 2012, all 14 states had started implementing new or revised teacher and leader evaluation systems, whether wholesale or by rolling out different components over a few years. The updates to these systems were many and varied. Some of the updates were made to meet conditions for a state's Race to the Top grant or a state's ESEA waiver. All states reported that they plan to fully implement their new evaluation systems by 2015-16, although a few have delayed the use of evaluation results to inform personnel decisions.

States *leading* the charge to update measures in *both their teacher and leader* evaluation systems to articulate the knowledge and skills that practitioners need in a college- and career-readiness environment are Colorado, Louisiana and Tennessee. Looking at teacher and leader evaluation systems separately, states with leading efforts are as follows.

- *Leading states* in aligning ***teacher*** evaluation measures are Colorado, Louisiana, New York, South Carolina and Tennessee.
- *Leading states* in aligning ***leader*** evaluation measures are Colorado, Louisiana and Tennessee.

Leading states stood out according to the following criteria.

- *Updated Professional Standards:* The state department of education has updated the state's professional teaching and leadership standards to define more clearly what effective teaching and leadership entail in light of the new expectations for students.
- *Updated Classroom Observation Tools and Principal Practice Measures:* The department has updated the state's classroom observation tools, including rubrics, guides or checklists, and principal practice measures including rubrics or leadership criteria, to identify more clearly what effective teaching and leadership look like in college- and career-readiness contexts.
- *Extensive Use of Evaluation Data:*
  - The department requires or recommends that local practitioners use evaluation results to identify individual strengths and areas for improvement and professional learning.
  - The department provides guidance and support to districts to enhance their use of data for large-scale planning.
  - The department aggregates individual evaluation results to identify statewide trends, which can inform planning for state-level initiatives. The department also points practitioners to professional learning resources based on their unique evaluation results – for example, resources available through a statewide electronic platform or archive.

Teacher and Leader Evaluation

As of 2012, all 14 states had started implementing new or revised teacher and leader evaluation systems. They all plan to fully implement the systems by 2015-16, although a few have delayed the use of evaluation results to inform personnel decisions.

States leading the charge to align measures in ***both*** their teacher and leader evaluation systems to their new college- and career-readiness standards are Colorado, Louisiana and Tennessee.

Starting Point: States' Newest Work in This Area

The work described in this section includes these most recent developments, most in 2014:

- One state (Kentucky) updated its professional teaching standards to articulate more explicitly what successful teaching of the state's new standards looks like in the classroom.
- One state (Tennessee) updated its leadership rubric to articulate more explicitly what successful leadership looks like in schools implementing the state's new standards.
- Ten states developed more resources to support local educators in developing and selecting student growth measures for non-tested grades and subjects that align to the states' new standards, where appropriate.
- Ten states provided more tools to support district and school leaders in using evaluation results to drive continuous improvement.

- Six states (Colorado, Delaware, Kentucky, Louisiana, Maryland and South Carolina) have adjusted timelines for when evaluation results, or certain components of evaluation results, become high-stakes. While all of the 14 states had started implementing new or revised teacher and leader evaluation systems in 2012, those six states have delayed the impact of summative evaluation results and/or of student growth and achievement data for teachers and/or leaders on personnel decisions until 2014-15 or later.

For a detailed profile of each of the 14 states' efforts in this area between 2010 and summer 2014, see the accompanying topic-specific report in this series on *Evaluation of Teachers and Leaders*.

Trends Across the States: Aligning Professional Teaching and Leadership Standards

Most states adopted or developed professional teaching and leadership standards that were informed by models widely recognized as defining basic skills and knowledge needed for effective teaching and leading in a college- and career-readiness environment.

- *Teaching Standards:* Seven states used the Interstate Teacher Assessment and Support Consortium (InTASC) standards to develop their professional teaching standards. InTASC is a consortium of state education agencies and national organizations in collaboration with CCSSO. Eight states used the Danielson Framework for Teaching. Developed by Charlotte Danielson, the framework consists of a set of components of instruction aligned to the InTASC standards. A few states used both the InTASC standards and the Danielson Framework as resources. Three states developed their own teaching standards, with a focus on general standards-based instruction.
- *Leadership Standards:* Fourteen states used the Interstate School Leaders Licensure Consortium (ISLLC) Standards for School Leaders to develop their professional leadership standards. The ISLLC standards were developed by the National Policy Board for Educational Administration and its constituents in collaboration with CCSSO. A few states also used resources from other organizations such as SREB, the Southern Association of Colleges and Schools, and McREL.

Aligned Professional Standards

Seven states have developed or updated their professional teaching and/or leadership standards to articulate more explicitly the skills, knowledge and practices needed to be effective in a college- and career-readiness environment.

- ***Teaching standards:*** Colorado, Kentucky, Louisiana, New York, South Carolina and Tennessee
- ***Leadership standards:*** Colorado, Louisiana and Tennessee, Maryland currently is in the process of updating these standards

Seven states (listed below) have gone further, developing or updating their standards to articulate more explicitly key skills, knowledge and practices needed to be effective in a college- and career-readiness environment. The standards in these states provide practitioners with stronger support as they strive to be effective in the context of their state's new student learning standards.

- *Teaching standards:* Colorado, Kentucky, Louisiana, New York, South Carolina and Tennessee
- *Leadership standards:* Colorado, Louisiana and Tennessee, Maryland currently is in the process of updating these standards

Trends Across the States: Aligning Measures within the Systems

This section addresses key components of evaluation models that are established at the state level and the extent to which the measures within them are aligned to new college- and career-readiness standards. In some states, districts design many aspects of their own evaluation systems.

Teacher evaluation: Classroom observations

By 2014, all 14 states had a component in their teacher evaluation system focused on teacher professional practice. A key measure for this is the observation of teachers in their classrooms. States vary as to whether they stipulate the use of a certain rubric, tool or set of criteria to guide evaluators in their observations.

- Most states' rubrics are informed by tools widely regarded as defining skills and knowledge that form a **basic foundation** for effective teaching in a college- and career-readiness environment, such as the Danielson Framework.
- Four states have **gone further, tailoring their rubrics to articulate more thoroughly the skills and practices needed for effective teaching of college- and career-readiness standards**. This provides teachers and evaluators with stronger support in the evaluation process. The four states are Colorado, Louisiana, South Carolina and Tennessee.
- Six states provide supplemental guidance to teachers and evaluators to facilitate the use of the rubrics in college- and career-readiness settings: Delaware, Louisiana, New York, North Carolina, Pennsylvania and Tennessee.

Leader evaluation: Professional practice

By 2014, all 14 states had a component in their leader evaluation system focused on principal professional practice. Measures for this component vary across states, including whether or not the department stipulates the use of a certain rubric or set of criteria. Most often the measures include ratings on a rubric based on on-site visits and conferences with the evaluator, and on progress toward professional growth goals.

- Most states' rubrics were informed by criteria that are widely regarded as **defining basic skills and knowledge** that principals need to lead effectively in schools implementing college- and career-readiness standards, such as the ISLLC standards.
- Three states **went further, tailoring their rubrics to define explicitly the skills and knowledge needed to be an instructional leader in a college- and career-readiness environment**. This provides principals and evaluators with stronger support in the evaluation process. The three states are Colorado, Louisiana and Tennessee. Maryland is in the process of doing so.

Aligned Classroom Observation and Principal Practice Tools

Five states have tailored their classroom observation rubrics and/or their principal practice rubrics, to articulate more thoroughly the skills and practices needed for effective teaching and leadership in the context of college- and career-readiness standards.

- ***Classroom observation rubrics:*** Colorado, Louisiana, South Carolina and Tennessee
- ***Principal practice rubrics:*** Colorado, Louisiana and Tennessee; Maryland is in the process of updating its rubric

- Delaware and Pennsylvania, while not tailoring their rubrics, do provide supplemental guidance and resources to principals and evaluators to facilitate the use of the rubrics in college- and career-readiness settings.

Teacher and leader evaluation: Measures of student growth and achievement

This section describes measures of student learning in teacher and leader evaluation systems based on annual state assessments and other student outcome data related to the content areas of ELA and math. *(Note:* The information provided in this report about the alignment of state assessments to new college- and career-readiness standards was based on information available publicly at the time of publication, which was self-reported by the states and test developers.)

- *For Teachers of Tested Grades and Subjects:* By 2014 all of the states included measures of student growth and achievement on annual state assessments as part of their teacher evaluation systems; four use only annual state assessments. Nine states use annual state assessments and incorporate other locally-selected measures such as district assessments, third-party assessments and national assessments. One state, Alabama, has not yet determined how it will incorporate student growth and achievement into its system. **State approaches to aligning their annual summative assessments have varied.** For details, see the section above on *Trends Across the States: Aligning State Assessments to the New Standards*.

- *For Teachers of Non-Tested Grades and Subjects* (the subjects and grades not included in the regular state testing program, such as K-2 in reading, writing and math), states allow a wide variety of measures. For example, these measures include locally developed student learning targets or objectives based on district or national assessments.

  - **Most states leave the selection of these measures to the local level,** and 12 states provide models and guidance, lists of approved national and third-party assessments, or common assessments for local use. For example, Colorado, Delaware and North Carolina provide a large number of common assessments which the state departments of education reported are aligned to the new standards where appropriate.

Measures of Student Growth and Achievement, and Other Measures

- ***Annual ELA and math tests:*** Thirteen of the states plan to have assessments fully aligned to the new standards in place for 2014-15; Tennessee plans to meet this goal by 2015-16. For details, see the section above on *Trends Across the States: Aligning State Assessments to the New Standards*.

- ***Measures for teachers of non-tested grades and subjects:*** States allow a wide variety of measures, and most leave the selection of these measures to the local level while providing guidance for selecting measures aligned to the new standards, where appropriate.

- ***Other measures:*** 10 states also incorporated additional kinds of measures that can be determined at the local level, for example, stakeholder surveys, professional growth goals and student portfolios. These measures may or may not be aligned to the states' new standards.

Georgia, New York and Pennsylvania provide a large number of model student learning objectives which the departments reported are aligned to the new standards where appropriate (for example, K-2 in ELA and math).

- Alabama has not yet determined how student growth and achievement measures from non-tested grades and subjects will be incorporated.

- *For Leaders:* All of the states include measures of student growth and achievement as part of their leader evaluation systems. Thirteen states include data from tested grades and subjects, usually school-wide growth on the annual state assessments. Eleven states also include data from non-tested grades and subjects, and states allow measures and local flexibility similar to those mentioned above for teachers of non-tested grades and subjects. One state (Alabama) has not yet determined how it will incorporate student growth and achievement into its system.

Teacher and leader evaluation: Other measures of effectiveness

By 2014, 10 states also incorporated the use of various other kinds of measures into their teacher and leader evaluation systems to get a comprehensive look at performance. Typical measures include stakeholder surveys, professional growth goals and student portfolios. These measures may or may not be aligned to the states' new college- and career-readiness standards. For example, Kentucky uses Vanderbilt University's Val-Ed Survey in its leader evaluation system. The survey addresses topics related to the ISLLC standards, and the ISLLC standards are widely regarded as articulating general skills and knowledge needed to effectively lead in a college- and career-readiness environment. Most of these states allow the determination of these measures at the district or school level.

Trends Across the States: Use of Evaluation Data for Continuous Improvement

By 2014, most of the states required or encouraged local evaluators to use evaluation results to identify individual practitioner strengths, areas for improvement, and appropriate professional learning. Most of the states also required or encouraged districts to use aggregated results to inform their large-scale improvement planning. **Most states aggregated teacher and leader evaluation data** to identify statewide trends in strengths and areas for improvement, which can inform large-scale professional learning and other supports. **Notable state efforts include those listed below**.

- Five states — Georgia, Louisiana, New York, North Carolina and South Carolina — offer the most extensive supports to local leaders to strengthen their use of evaluation data to identify areas for school- and district-wide professional learning. These supports include the provision of an online reporting and data analysis platform, professional learning on the use of data, technical assistance, guidance and other resources.

- Kentucky and North Carolina provide personalized, online professional learning resources directly to individual teachers and leaders based on their evaluation results. Georgia, Louisiana, Mississippi and Pennsylvania offer online professional learning resources aligned to specific teaching and leadership standards for educators to access based on their evaluation results.

Highlights From Two Leading States

Colorado

Colorado's model teacher support and evaluation system is called the Colorado State Model Evaluation System, and its model leader effectiveness system is called the Colorado Model Educator Evaluation System for Principals and Assistant Principals. In 2013-14, all districts were required to implement teacher and leader evaluation systems, whether their own or the state's models, that meet or exceed state law.

Updated professional standards:

- The Colorado Department of Education developed its professional teaching standards, called the Teacher Quality Standards (TQS), and its professional leadership standards, called the Principal Quality Standards (PQS), using nationally-recognized teaching and leadership standards as resources. These included the InTASC standards for teachers and the ISLLC standards for principals, both of which are widely regarded as defining skills and knowledge that form a basic foundation for effective teaching and leading in a college- and career-readiness environment.
- Further, the department tailored the state's teaching and leadership standards to incorporate the instructional shifts required by the state's new college- and career-readiness standards (the Colorado Academic Standards, or CAS).

Aligned classroom observation tool and leadership rubric:

- When the department developed its state teacher evaluation rubric, which includes observable elements, and its professional practice rubric for principals, it specifically considered the instructional shifts required by the CAS. The rubrics were developed to provide explicit guidance and concrete examples of skills and knowledge necessary for teaching and leading in a CAS environment.
- Districts in Colorado can use the state rubrics or their own, as long as they meet or exceed the TQS and PQS.

Extensive use of evaluation data to inform improvement efforts:

- Following teacher evaluations, evaluators are required to direct teachers to appropriate professional development opportunities based on their results, and the department recommends that schools and districts use aggregated evaluation data to inform their large-scale professional development.
- Following leader evaluations, districts and regional Boards of Cooperative Educational Services are required to collect and analyze performance data to provide actionable feedback and professional learning support to principals.
- To support further use of evaluation data, in spring 2014 the department piloted a State Model Online Performance Management System, with full implementation in 2014-15. This online system is available for districts as a tool to collect and analyze evaluation results and to develop reports with feedback for practitioners.
- The department plans to aggregate individual teacher and principal evaluation results in spring 2015. These data will be used to identify statewide trends in strengths and areas for improvement, which can inform the department's ongoing design of large-scale improvement initiatives.

Tennessee

The state implemented its Tennessee Educator Acceleration Model (TEAM) for teachers and administrators statewide in 2011-12.

Updated professional standards:

- The Tennessee Department of Education developed its own professional teaching standards, called the TEAM Standards, and its professional leadership standards, called the Tennessee Instructional Leadership Standards (TILS), using many nationally recognized standards as resources. These included the ISLLC standards for principals.
- Further, the department revised the TEAM standards and the TILS to better align them to the Common Core.

Aligned classroom observation tool and leadership rubric:

- The department revised its classroom observation rubric, which is based on the TEAM standards, to more explicitly articulate the expectations for teaching and learning in a Common Core environment.
- In 2014-15 the state is implementing a revised professional practice rubric for principals, based on the TILS, that provides explicit examples and guidance on skills and knowledge that principals need to effectively lead schools in a Common Core environment.

Extensive use of evaluation data to inform improvement efforts:

- Districts and evaluators are required to use evaluation data to identify individual teacher and principal strengths, areas for improvement, and appropriate professional learning, and the department encourages districts to use aggregated evaluation results to inform large-scale professional learning.
- To support the use of evaluation data, the department provides the National Institute for Excellence in Teaching (NIET) Best Practices Portal (www.nietbestpractices.org), which offers a wealth of resources on classroom observations, coaching, and implementing the evaluation system. It also provides resources for giving feedback and coaching. Tennessee reports that over 5,000 school and district leaders and 70,000 teachers are registered on the portal.
- The department also provides the CODE online platform, enabling districts to collect and analyze evaluation results.
- The department aggregates individual teacher and leader evaluation results to identify statewide trends in strengths and areas for improvement to inform school support, leader development activities, and initiative planning.

Accountability

What accountability measures have states put in place to hold schools accountable for teaching and learning of the new college-and career-readiness standards? Accountability systems are an important link in the chain of effective implementation of student learning standards. Accountability systems help states articulate their goals for public education and establish targets for schools and districts to work toward. They provide a way for states to report to the public on how schools are performing. They influence how state departments of education structure their work with local systems and schools.

Overview of SREB's Look at State Efforts

SREB researchers reviewed states' general statewide accountability systems and aspects of another system through which states can track outcomes and hold educators accountable for improving outcomes for students: annual accountability reporting for the use of federal Title III funds. States and their district subgrantees receive Title III funds to serve English learners (called Limited English Proficient students in federal law), and immigrant children and youth. In turn, they must report on three annual targets, or Annual Measurable Achievement Objectives (AMAOs). **SREB researchers reviewed the following aspects of state accountability systems and reporting.**

- *Statewide Accountability System*
  - *Context:* Why did the state revise its accountability system? For example, did the state revise the system as part of a larger set of reforms or in response to recommendations of a statewide task force?
  - *English Language Arts and Math Assessments:* What are the annual summative grade-level and course assessments in ELA and math for which schools must meet annual targets? To what extent are these tests aligned to the state's new college- and career-readiness standards?
  - *Other Measures:* Does the statewide accountability system include additional types of measures that provide stakeholders with information about teaching and learning of the state's new standards?
  - *Measures of College and Career Readiness:* Does the statewide accountability system include measures of college and career readiness (for example, ACT or SAT exams), and if so, to what extent are they aligned to the state's new standards?
- *Accountability Reporting for Title III*
  - What are the assessments the state uses to measure results for each AMAO and to what extent are they aligned to the state's new college- and career-readiness standards?

This report does not seek to explain states' entire accountability systems, which can include many goals, only some of which relate to student learning of states' new college- and career-readiness standards in ELA and math. This report describes the measures states had in place as of summer 2014.

Leading State Efforts

While all 14 states have made strides in accountability system reform, *leading states*, those with the most comprehensive sets of measures that provide stakeholders with information about teaching and learning of the state's new college- and career-readiness standards, are Georgia, Kentucky and North Carolina.

Leading states stood out according to the following criteria.

- *General Statewide Accountability System Annual Targets for Schools Include:*
  - Measures of student learning in ELA and math based on annual summative grade-level and course assessments that are aligned to the state's new standards
  - Other measures that provide information about teaching and learning of the state's new standards
  - Multiple college- and career-readiness measures that provide information about student preparedness for the rigors of postsecondary work
- *Title III Accountability Reporting Targets Include:*
  - AMAOs based on data from assessments, particularly the state's English Language Proficiency (ELP) assessment, that are aligned to the state's new standards

Accountability Measures

In their general statewide accountability systems, by 2014 all 14 states had targets for annual summative assessments in ELA and math that they reported either were or would soon be aligned to the state's new college- and career-readiness standards.

For Title III accountability reporting, all of the states use or plan to use by 2015-16 results from English Language Proficiency assessments for English learners that were designed to measure mastery of the linguistic knowledge and skills inherent in the states' new college- and career-readiness standards.

Leading states have an extensive array of ELA and math assessments and additional types of measures that provide information on teaching and learning of the states' new standards, plus multiple college- and career-readiness measures. They also have aligned English Language Proficiency assessments.

Starting Point: States' Newest Work in This Area

The work described below includes these most recent developments, all in 2014:

- Colorado enacted legislation to delay the impact of its new, fully aligned assessments on school accountability ratings until 2015-16.
- Kentucky received approval from the U.S. Department of Education to incorporate results from its teacher and leader evaluation systems into its statewide accountability system.
- The U.S. Department of Education approved three states' requests to modify aspects of their accountability system or their implementation timeline. Kentucky requested a one-year extension for implementation of its system. Mississippi requested that its new assessments in 2014-15 not impact school accountability ratings until 2015-16. Delaware requested revisions to the design of certain components of its accountability system.

For a detailed profile of each of the 14 states' efforts in this area between 2010 and summer 2014, see the accompanying topic-specific report in this series on *Accountability*.

Trends Across the States: Context for Accountability System Reform

All 14 states in this study have recently revised their statewide accountability system. Since 2011, the states have received waivers to certain provisions of NCLB from the U.S. Department of Education. To be granted this flexibility all states had to adopt certain policies the U.S. Department of Education considered fundamental to reform. Along with developing new accountability systems, states had to commit to adopting college- and career-readiness standards and aligned assessments, including aligned alternate assessments for students with the most significant cognitive disabilities and aligned ELP standards and assessments for English learners, and educator effectiveness systems that incorporate the use of student performance data. States are working hard to integrate the work of such complex reforms.

Additionally, four states had legislation in place that supported their accountability system reforms: Alabama, Colorado, Kentucky and Maryland. Four states had other kinds of statewide accountability reform initiatives, such as statewide accountability task forces or committees that pushed for the redesign of their systems: Alabama, Kentucky, North Carolina and West Virginia.

Trends Across the States: ELA and Math Accountability Measures

All 14 states designed their new accountability systems to include annual summative grade-level and course assessments in ELA and math. However, the extent to which these assessments have been aligned to each state's new college- and career-readiness standards varies. See the section above on *Trends Across the States: Aligning State Assessments to the New Standards* for details.

Notably, Colorado and Georgia also include in their states' general school accountability measures, targets on the annual ELP assessment for English learners. This helps to ensure that as stakeholders track school progress in helping *all* students achieve in the content areas, they track progress in supporting English learners as they learn English, a crucial aspect of supporting their overall academic growth.

Trends Across the States: Other Measures

Three states have additional kinds of measures that provide stakeholders with information on teaching and learning of the states' new college- and career-readiness standards. These measures complement test data and provide a richer picture of local practice and outcomes. The measures states had in place in 2014 and information about their alignment to states' new college- and career-readiness standards is summarized below.

- *Georgia has Lexile targets.* A Lexile score is an indicator of a student's ability to read and comprehend increasingly difficult texts as he or she proceeds through the grade levels. Lexile targets contribute to the accountability ratings of elementary, middle and high schools. Lexile scores are correlated to the state's reading and ELA assessments, which the state Department of Education reported are aligned to Georgia's College and Career Georgia Performance Standards (CCGPS).

- *Kentucky has Program Reviews and a Next-Generation Professionals Component.*
  - *Program Reviews:* This is a process by which local school teams, including stakeholder groups such as staff, parents and students, examine instruction, curriculum, assessments, administrative support, professional development, and other aspects of the school's programs. Every school in Kentucky must conduct an annual Program Review in at least one of the following areas: writing, arts and humanities, and practical living and career studies. Because Program Reviews include the examination of student work and assessments, the reviews can provide information about student learning of the Kentucky Core Academic Standards (KCAS) and about the school-level practices that support that learning.
  - *Next-Generation Professionals Component:* Beginning in 2015-16, Kentucky will incorporate teacher and leader evaluation results into its statewide accountability system. This component will constitute 10 percent of a school's total accountability score. No individual evaluation ratings will be made public; schools will receive an overall performance rating based on an aggregate rating for all educators. These data provide information about teaching, learning and leading of the KCAS. (See the accompanying state profile on *Evaluation of Teachers and Leaders* for more information.)
- *North Carolina has the Graduation Project.* The Graduation Project is an optional high school performance-based assessment. Students complete projects that consist of components such as a research paper, a portfolio and an oral presentation. The process draws on the Common Core areas of ELA and literacy, and on skills that support the Common Core's focus on postsecondary readiness, such as teamwork, problem-solving and use of technology.

Trends Across the States: Measures of College and Career Readiness

College- and career-readiness measures can provide information about student mastery of a state's college- and career-readiness standards and about student preparedness for the rigors of postsecondary work. **Eight states incorporate measures of college and career readiness:** Alabama, Colorado, Georgia, Kentucky, Louisiana, Maryland, North Carolina and Pennsylvania. The measures states had in place in 2014 and what is known about their alignment to states' new college- and career-readiness standards are summarized below.

- *The most widely used measures of college and career readiness are exams.* The most common exams are the ACT, SAT, International Baccalaureate (IB), Advanced Placement (AP) and WorkKeys. ACT and the College Board report that the ACT and SAT exams are aligned to the Common Core, and the College Board and the IB organization report that the programs and courses leading to the AP and IB exams support student learning at and beyond the level of rigor of the Common Core. However, the extent of alignment of the WorkKeys exam could not be determined at the time of publication.
- *Four states also have additional measures:* Alabama, Georgia, Maryland and Pennsylvania. These states have targets for at least one of the following: students earning postsecondary credit or industry certifications while in high school, student enrollment in college within 16 months of graduation, and schools offering students access to college courses. These measures support and build upon the college- and career-readiness focus of the states' new standards.

Trends Across the States: Accountability Reporting for Title III Funds to Serve English Learners

States and their subgrantees (usually districts) receive federal Title III funds to serve English learners (called Limited English Proficient students in federal law), and immigrant children and youth. In turn, states must report (at the state level and by subgrantee) on three annual targets, or Annual Measurable Achievement Objectives (AMAOs), listed below.

1. Progress Toward English Proficiency: The number or percentage of students who improve their English fluency
2. Attaining English Proficiency: The number or percentage of students who "reach the finish line" of becoming fluent in English
3. Academic Achievement in the Content Areas: Academic achievement of English learners in ELA and math

For AMAOs 1 and 2, states use ELP assessments. The assessments states had in place in 2014 and what is known about their alignment to states' new college- and career-readiness standards are summarized below.

- *Eleven states use the WIDA Consortium's ACCESS for ELLs test:* Alabama, Colorado, Delaware, Georgia, Kentucky, Maryland, Mississippi, North Carolina, Pennsylvania, South Carolina and Tennessee. South Carolina, however, has not yet determined what ELP assessment it will use in 2015-16 and beyond. The ACCESS for ELLs test is designed to measure student mastery of the language skills inherent in the Common Core, and it has been shown in a WIDA alignment study to have moderate to strong alignment.
- *Three states use other ELP assessments.* Louisiana uses the ELDA test, developed by states partnering with CCSSO. West Virginia uses its West Virginia Test of English Language Learning (WESTELL). The ELDA and WESTELL are not aligned to the states' new standards, but both states plan to use the new test from the ELPA21 consortium when it becomes available in 2015-16. ELPA21 is aligning its assessment to the Common Core. New York uses its own New York State English as a Second Language Achievement Test (NYSESLAT). The NYSESLAT was partially aligned to New York's CCLS in 2013-14, and New York reported that it will be fully aligned by 2015-16.

For AMAO 3, states generally report the subgroup scores for English learners on the state ELA and math content area assessments. See the section above on *Trends Across the States: Aligning State Assessments to the New Standards* for details about these assessments and their alignment to the states' new standards.

Highlights From a Leading State

Georgia

Georgia's new general statewide accountability system, the College and Career Ready Performance Index (CCRPI), became operational in 2012-13. Accountability measures and their alignment to the College and Career Georgia Performance Standards (CCGPS) include those listed below.

- *English language arts and math annual summative content-area assessments,* including alternate assessments for students with the most significant cognitive disabilities. The state Department of Education reported that these are fully aligned to the CCGPS.

- *An additional type of measure* of student learning in ELA: Lexile reading-level targets. (See the description of Lexile targets in the section above on *Trends Across the States: Other Measures.*) The department reported that the Lexile measure is aligned to the CCGPS.

- *An extensive set of college- and career-readiness measures:*

  - ACT, SAT, AP and IB exams. ACT and the College Board report that the ACT and SAT exams are aligned to the Common Core. The College Board and the IB organization report that the programs and courses leading to the AP and IB exams support student learning at and beyond the level of rigor of the Common Core.

  - The Compass college entrance exam. The extent of alignment of this exam could not be determined at the time of publication.

  - The following measures, which provide information on the extent to which students are ready for the rigors of postsecondary work. These measures support the principles of the CCGPS.

    – Students earning national industry recognized credentials, IB career-related certificates, or Georgia-developed career pathway assessments

    – Students completing a three-course career pathway

    – Students earning dual enrollment credit while in high school

    – Graduates entering in-state postsecondary institutions without requiring remediation

    – For middle grades schools: Students completing two or more career-related assessments and an Individual Graduation Plan

    – For elementary schools: Students completing career-awareness lessons

Additionally, in Georgia's Title III accountability reporting, for AMAOs 1 and 2, the state uses the WIDA ACCESS for ELLs test. WIDA reports that this test is aligned to the Common Core.

Successes, Challenges and Next Steps: Perspectives From the Field

SREB set out on this benchmarking project to understand states' efforts to implement new college- and career-readiness standards and related reforms. Researchers sought not only to document actions and decisions the states have taken but also to understand how people in the states feel this work is going, what they plan on doing next and what supports they need to carry the work forward. To accomplish this, researchers interviewed leaders in state departments of education, members of state boards of education, higher education leaders, and legislators, as well as teachers, principals, district superintendents, union leaders and members of business and community organizations. In most states, people representing each of these perspectives provided information, although all these individuals were not available in every state. The perspectives from the field described below reflect trends across all of the interviews in all of the states.

Trends Across the States: Successes

Across participants in the varied role groups interviewed across all of the states, the following successes were most commonly cited.

- *All 14 state departments of education have undertaken comprehensive efforts* to lead and support implementation of their state's new college- and career-readiness standards, aligned assessments and related reforms. Interviewees appreciated how much their state department of education has done to chart a course and provide local systems, schools, teachers and leaders the supports and resources they need.
  - *Some state departments of education have expanded their roles* to meet the new demands of this reform environment. Veterans in some departments shared that they have responded to unprecedented requests for support from the field, providing more kinds of support and resources than at any time in the past.
- *People from all of the groups interviewed gave good reviews of the standards and of states' efforts.*
  - Teachers and principals, in particular, shared that the new standards are an improvement over their states' previous standards. Many noted that since so many states have adopted new college- and career-readiness standards, students have access to an education that is more consistently high-quality. This is valuable for military families and others with high rates of mobility during their children's school careers.
  - Teachers reported that their states' professional learning and aligned teaching resources have been extremely valuable in their daily practice and for their overall professional growth.
- *State departments of education are collaborating with other leaders, educators and stakeholders in their states, and with other states.*
  - Department staff in many states reported that they have been collaborating extensively with regional entities, districts, schools and teachers — more so than most could remember. State board of education members and governors' staffs in some states reported that a key success has been the involvement of the business sector and others in the community in building support for the reform.

- Departments have also engaged in partnerships across states that help them to accomplish and enrich significant aspects of their work. Highest profile of these partnerships are the multi-state assessment consortia (particularly PARCC and Smarter Balanced) and both formal and informal sharing of instructional resources and materials. The tools that interviewees reported sharing most among their local colleagues and across states are the materials on New York's EngageNY website and resources from Achieve, Student Achievement Partners, CCSSO, and LDC/MDC. Teachers in particular expressed great appreciation for these resources.

◆ *K-12 has engaged in unprecedented collaboration with higher education.* Interviewees praised partnerships between leaders in K-12 and higher education. For example, interviewees cited the participation of higher education leaders on states' PARCC and Smarter Balanced leadership teams, the participation of higher education faculty in some states' professional learning for teachers, and state participation in the Core to College project (states in this study that participate in Core to College are Colorado, Kentucky, Louisiana, North Carolina and Tennessee). Such collaboration builds a foundation for ongoing work to bring K-12 and higher education policies into alignment and to foster shared understandings of the knowledge and skills needed for success across K-12 classrooms, college courses, job training and careers.

◆ *States have had additional funding to bolster their efforts.* In states that received Race to the Top grants and grants from private foundations, state department of education staff reported that these funds have been essential in supporting their initiatives.

Trends Across the States: Challenges

Across participants in the varied role groups interviewed across all of the states, the following challenges were most commonly cited.

◆ *Sheer Size of the Effort:* Interviewees were realistic about the fact that the sea change in public education required by the new college- and career-readiness standards, aligned assessments and related reforms necessitates massive and long-term efforts. The work has just begun, and state departments of education have undertaken it with small staffs and tight budgets, making their efforts all the more impressive — and fragile.

Successes

- ***Comprehensive reform efforts:*** All 14 states have undertaken comprehensive, multi-year efforts to lead and support implementation of their new standards, aligned assessments and related reforms.
- ***Good reviews of the standards and state efforts:*** Interviewees across all the role groups interviewed gave good reviews of the new standards and strong marks to their state department of education's professional learning, aligned teaching resources and implementation support.
- ***More collaboration:*** Several of the departments have been working closely with districts, educators, stakeholders — and other states — more than they ever have before. Leaders at the K-12 level and in higher education have also worked together to bring K-12 and higher education policies into alignment and to foster shared understandings of the knowledge and skills needed for success across K-12 classrooms, college courses, job training and careers.

- *Integration of Reforms:* Teachers especially highlighted the need for better integration of the new standards and assessments with other, concurrent state reforms such as the new accountability systems and new teacher and leader evaluation systems. Many educators reported that in their professional learning and in their daily practice they do not clearly see the connections between these reforms, leading to confusion and frustration and impeding improvement.

- *Variation in Local Implementation of the Standards:* Teachers, principals and district superintendents reported that the readiness of teachers and local leaders to implement the new standards varies considerably across districts and even within schools.

  - One factor contributing to this uneven readiness that many interviewees noted is the variation in amount and quality of professional learning and implementation resources that practitioners have experienced. While the interviewed practitioners gave high marks to the professional learning and implementation supports their state department of education has provided, they pointed out that many educators in their school and district have not participated directly in the state-provided trainings. Even teachers who did participate indicated that they need still more support, time and resources to implement the standards successfully. Further, according to interviewees, when school and district leadership teams have returned home to redeliver the state's trainings to local peers, they often have not presented the material in as much depth as the state-based personnel had, or with fidelity to the model.

- *Sustainability of Efforts:* Many states had large infusions of funding, such as Race to the Top grants and other external support, to bolster their early initiatives. As state departments of education prepare for the future, they must determine how to continue or modify their initiatives when the temporary funding ends.

- *Assessment Technology:* While many districts and schools have the technology infrastructure and capacity to administer new computer-based assessments, many still do not. This issue is especially acute in small and rural districts. As well, several teachers

Challenges

- ***Scale:*** These reforms are massive and require long-term efforts to foster real change in local practices.
- ***Complexity and communication:*** Educators and the public need to better understand the standards and how they relate to other reforms such as new state accountability systems and new teacher and leader evaluation systems.
- ***Sustainability of efforts:*** Many states had large infusions of funding to support their early implementation initiatives. They must now determine how to continue or modify their initiatives when this temporary influx ends.
- ***Variation in local implementation:*** Educator readiness to implement the new standards varies considerably across districts and even within schools.
- ***Assessment technology:*** While many districts and schools have the technology infrastructure and capacity to administer new assessments online, many still do not. This issue is especially acute in small and rural districts.

reported that even though their school has enough computers to administer online assessments on a given day, students do not receive enough regular learning time on a computer during the school year to enable them to perform at their best on a computer-based test.

- *Communication:* Despite the outreach, training and information disseminated by the state departments of education, educators and the public still need to better understand the states' new college- and career-readiness standards, how they differ from states' previous standards and how the more rigorous demands of the new standards inform related initiatives (for example, new approaches to instruction, new assessments and new teacher and leader evaluation systems). Confusion has frustrated educators in their efforts to implement the standards and has hampered the pace of overall reform.

Trends Across the States: Next Steps

Across all the participants in the varied role groups interviewed across all of the states, the following next steps for states were most commonly cited.

- *Press ahead on standards reform — although the direction of these efforts varies widely across the states.*
  - *Some states are proceeding with implementation of the standards that they adopted and are launching initiatives to build upon and support the standards.* For example, in 2014 Delaware Governor Jack Markell helped to launch the Partnership for Higher Standards, led by the Bipartisan Policy Center, the U.S. Chamber of Commerce Foundation and the Hunt Institute, to strengthen support for the Common Core. In 2013, West Virginia joined the Improving Student Learning at Scale Policy Collaborative, a partnership of six states, the NGA, the CCSSO and the National Conference of State Legislatures, focusing on Common Core implementation. In 2014, Tennessee launched a STEM Leadership Council to provide guidance to the department on STEM initiatives. In 2013, legislation in West Virginia and Maryland required further alignment of college- and career-readiness reforms across the K-12 and higher education sectors.
  - *Between 2013 and 2014, seven states took another look at their new standards, and the result of these reviews may bring changes to the standards or to other aspects of the reform.* Six states — Colorado, Georgia, Maryland, Mississippi, New York and North Carolina — convened a formal review of their standards adoption, standards implementation processes, and/or assessments. While in Mississippi and New York the reviews resulted in a strengthening of the states' efforts to implement the standards, recommendations from the reviews in Colorado, Georgia, Maryland and North Carolina are still to come in late 2014 and in 2015. In 2014 a seventh state, South Carolina, decided to replace the Common Core. Legislation in South Carolina requires the state Department

Next Steps

- Press ahead with implementation of the new standards and aligned assessments, though the direction of these efforts varies widely across states
- Continue efforts to provide educators with professional development and aligned teaching tools to support long-term implementation of the standards
- Improve communication about the standards

of Education to develop new standards for ELA and math for implementation in 2015-16, and in the meantime the state will continue to implement the Common Core in 2014-15.

- *Move forward with assessments.* Thirteen of the states plan to have assessments that are fully aligned to their new standards in place for the 2014-15 school year; Tennessee plans to meet this goal by 2015-16.
  - *Six states plan to use new assessments from one of the two multistate assessment consortia.* Four states plan to use PARCC tests: Colorado, Louisiana (for grades three through eight), Maryland and Mississippi. Two states plan to use Smarter Balanced tests: Delaware and West Virginia.
  - *Nine states plan to use their own aligned assessments.* These states have, or plan to have, aligned tests that are either developed for them or acquired from a vendor: Alabama, Georgia, Kentucky, Louisiana (for high school), New York, North Carolina and Pennsylvania. South Carolina is currently engaged in a test procurement process, and Tennessee plans to use its existing, partially aligned tests for 2014-15 and to select new, fully aligned tests for 2015-16.
  - *As states work with local systems to address issues with technology capacity,* some states plan to offer paper-based versions of new assessments for the first few years.
- *Continue professional development.* Four years into the work of leading implementation of their new standards, state departments of education and their key partners must determine how to carry their professional learning initiatives forward, and/or whether to develop new approaches to foster long-term progress. Complicating matters is the fact that states grapple with tight education budgets, and the 10 states that received Race to the Top grants now face the end of that funding. Interviewees from state departments of education shared possible approaches that fell into two categories: Several states plan to continue aspects of their current initiatives in a scaled-back version. Possible modifications are to transition from providing face-to-face trainings to offering online, on-demand tools, and to shift responsibility for providing support from state leaders to district and school leaders. Some states plan to expand aspects of their current initiatives.
- *Increase and strengthen aligned teaching resources.* Many of the state departments of education posted large amounts of new resources in their online archives in 2014, and staff shared that they plan to continue to build on these offerings to support local curriculum development and strong classroom instruction.
- *Improve communication.* Interviewees in several of the state departments of education shared that plans are underway to work with the business community, governors' offices, parent organizations, other stakeholders and other states to establish more consistent public messaging about what their new standards are, what changes are needed, and how students — and schools, states and businesses — can benefit.

Moving Forward: Learning From Leading States and Supporting Educators

As state departments of education and other state leaders work to capitalize on their successes, tackle their challenges and continuously improve student achievement and public education overall, **SREB encourages each state to continue to support the implementation of its college- and career-readiness standards and aligned assessments. The recommended actions outlined below can help states push forward. They are based on the efforts of leading states and also on what interviewees across the participating states shared about what educators need to realize the promise of these reforms.**

- *Strengthen implementation supports and align targets for educators:* Leading states in this study provided educators with intensive professional learning and ongoing implementation support, strong sets of teaching resources, and measures of evaluation and accountability, all of which align to and sharpen the focus of teachers, schools and districts on helping students master the new standards. All states can further their efforts in the four following components of reform.

  - *Professional Learning and Implementation Support:* States in this study with leading efforts in professional learning collaborated intensively with local educators through direct work with school leadership teams and through integration of supports for practitioners in key role groups such as content-area teachers, school administrators and district leaders. Leading states also provided teachers with professional development opportunities outside of the training provided for school or district leadership teams, and large numbers of teachers participated. In addition, these states provided substantial, targeted professional learning for principals and district staff. Yet even in these leading states, interviewees shared that many practitioners still need more training and support to successfully implement the new standards. State departments of education should continue to provide professional learning and ongoing implementation support to practitioners, and bolster district and school efforts to provide training and support to all teachers, school administrators and district leaders.

  - *Teaching Resources:* Across the states, and even in states with leading efforts in this area, the aligned teaching tools the state departments of education offer can be enhanced in the following ways in order to ensure that teachers have tools and know-how to provide rigorous instruction on the new standards for all of their students.

    - *Types of Resources:* States should offer sets of sample instructional plans that model rigorous instruction for all of the standards in ELA and math for all grades K-12 and for all of the literacy standards in history/social studies, science, and technical subjects in grades six through 12. These plans should incorporate strategies and tools for teaching diverse learners such as English learners, students with disabilities, struggling learners and advanced learners.

    - *Quality and Alignment of the Resources:* While all of the states in this study have a process in place for reviewing the teaching resources they provide — or, in the case of one state, are in the midst of developing a method — not all are equally robust. State departments of education should employ vetting methods and criteria that are rigorous, explicit and systematic.

    - *Use of the Resources:* Many interviewees shared that the states' archives are underutilized because not enough educators even know about them. State departments of education should

help more educators learn about the available resources and should also train them on how to select and design their own high-quality, aligned tools.

- *Evaluation Systems:* Several states in this study have not updated key components of their teacher and leader evaluation systems since adopting their new college- and career-readiness standards. State departments of education should update professional standards, classroom observation tools and leadership rubrics to articulate more explicitly the new knowledge, skills and practices needed to successfully teach and lead in college- and career-readiness contexts. This will support practitioners and evaluators as they seek to identify and achieve goals for stronger performance. In states where districts establish their own evaluation tools and rubrics, the department can provide districts with models and guidance on selecting and developing high-quality, aligned tools.

- *Accountability Measures:* States, districts, schools and educators need shared targets that unite their focus on key levers to strengthen teaching and learning and improve the overall readiness of students for college and careers. As states continue to refine their accountability systems, they should consider including — as leading states in this study already do — multiple measures aligned to the new standards beyond just annual tests in ELA and math. Leading states have additional measures that complement test data and provide a richer picture of local practice and outcomes. For example, Georgia has Lexile targets, student reading level expectations aligned to the rigor of the state's new standards; Kentucky has Program Reviews, where local teams of stakeholders examine their school's program to provide authentic data about teaching and learning; and Kentucky has a next-generation professionals measure, the percentage of teachers and principals rated highly on the state's evaluation system, which helps to hold schools and districts accountable for strengthening the performance of educators. Further, leading states have measures of college and career readiness that

SREB encourages each state to continue to support the implementation of its college- and career-readiness standards and aligned assessments. The recommended actions below can help states push forward. They are based on the efforts of leading states and also on what interviewees across the participating states shared about what educators need to realize the promise of these reforms.

Strengthen implementation supports and align targets for educators; specifically in the following ways.

- ***Professional learning:*** States should continue to provide training and resources to practitioners, and bolster district and school efforts to provide professional learning and support to *all* teachers, school administrators and district leaders.
- ***Teaching resources:*** States should offer sets of sample instructional plans that model rigorous, differentiated instruction for all of the college- and career-readiness standards that states have adopted, for every grade and content area. Departments should help more educators learn about the available resources and how to select and design their own.
- ***Evaluation systems:*** States should update professional teaching and leadership standards, classroom observation tools and leadership rubrics to articulate more explicitly the new knowledge, skills and practices needed in college- and career-readiness contexts.
- ***Accountability measures:*** States should include multiple measures aligned to the new standards beyond the annual tests in ELA and math. Examples include measures of college and career readiness and other types of measures that supplement test data and provide a richer picture of local practices and outcomes.

provide information about student preparedness for the rigors of postsecondary work, such as ACT and SAT exams and rates of student enrollment in college after graduation.

States can strengthen their work on the above recommended actions in the following three ways; interviewees across role groups and states suggested these are essential to moving the work of their state, districts and schools forward.

- *Foster commitment to policies and funding.* State education leaders should work together and with leaders in other sectors and the public, to foster commitment to policies and funding that will support educators in their work over the long haul to prepare all students for success in postsecondary education and careers.
- *Strengthen the use of data to guide continuous improvement.* State departments of education, districts and schools need to collect, analyze and use data more effectively to understand their practice and to identify efforts that are working, efforts that are not, and places where refinements and improvements can be made. Interviewees shared that they need more time built into regular schedules and more professional learning to deepen staff capacity in this area.
- *Augment capacity at state departments of education to address emerging needs.* State departments of education are working with very small staffs and tight budgets. Interviewees in several of the states shared that their department needs to reorganize, redeploy or increase staff to meet local educators' increased needs for support. Many noted that their department needs more internal expertise in key areas, including content areas, change management, psychometrics, statistics, research and evaluation, teacher evaluation, and talent development. State departments of education can work together to help each other address these needs, and external partners, experts and funders can provide states with resources and know-how.

States can strengthen their work on the recommended actions in the following three ways:

- ***Foster commitment to policies and funding.*** State education leaders should work together and with leaders in other sectors and the public, to foster commitment to policies and funding that will support educators in their work over the long haul to prepare all students for success in post-secondary education and careers.
- ***Strengthen the use of data to guide continuous improvement.*** State departments of education, districts, and schools need to collect, analyze and use data more effectively to understand their practices and to drive continuous improvement.
- ***Augment capacity at state departments of education to address emerging needs.*** State departments of education may need to reorganize, redeploy or increase staff to meet local educators' increased needs for support. Needs include more internal expertise in key areas, such as content areas, change management, psychometrics, statistics, research and evaluation, teacher evaluation, and talent development.

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