

## SEC Content Analysis of Standards

### How to Read SEC Charts to Compare Common Core State Standards with State Standards

In 2010, the CCSSO Surveys of Enacted Curriculum (SEC) State Collaborative conducted a content analysis of the new Common Core State Standards in English language arts and mathematics. Now, many state, local, and school education leaders are using the online data reporting system ([www.SEOnline.org](http://www.SEOnline.org)) to compare their prior state content standards or assessments with the Common Core Standards. The following short guide outlines recommended steps for beginning in-depth analyses to focus the work of state education agencies, districts, or school leaders in leading change in curriculum and instruction to meet the new Common Core Standards.

#### **Access to SEC charts through Internet:**

There are now two **web pages** for accessing SEC charts comparing Common Core Standards to prior state standards.

a) Go to <http://seonline.org>

At this site, click on **Content Analysis** tab at top; then, “For access to content maps of Standards and Assessments analyzed thus far,” **Click here;**

**Select the subject, and Submit.** Use the pull-down menu on the left column to select CCSS(gr.) and on the right select State name(gr). and click on **Submit.**

(option: On the SEC web home page, you can also view data by choosing to use the LogIn to register or view data as a Guest)

b) Go to <http://www.box.net>. The SEC Collaborative is reporting Standards charts for many states through the webpage [www.box.net](http://www.box.net). If you have received an invite to this site, use the log-in to your account and then go to **SEC Collaborative Data Reporting**. Click on your state’s folder.

#### **Reading an SEC Standards Analysis chart:**

On the following page, we show an example of one chart that compares one state’s (Kansas) standards for Mathematics at one grade (6) with the Common Core Standards for Math at the same grade. We will refer to this chart and a succeeding chart to guide the reader through how these data can be used with any SEC content analysis chart or series of charts. The data display charts used in this example are “tile charts.” The SEOnline reporting system can also show the same data in a different format called “contour maps,” and the data you are reviewing may be in the contour maps. The descriptions and steps below apply to either tile charts or contour maps. An example of a chart comparing state standards for ELA and Common Core is show below also.

The leading question for our review of the example Kansas vs. Common Core chart is:

- 1. To what extent are the Common Core Standards consistent with prior Kansas state standards for math grade 6? Or for ELA grade 6? In what content areas do they differ?**

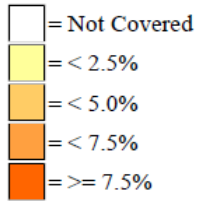
The SEC method of analysis uses two dimensions for analysis of content in a subject and grade—*content topic and expectation for learning (or cognitive demand)*.

Content topics are listed down the left side of each page. The content of the prior state standards for this grade is displayed on the left chart and the content of the Common Core standard for the same grade is displayed on the right. The colors shown in two content tile charts represent the degree of emphasis for a specific topic and expectation. Dark colors represent more emphasis and light colors less emphasis. The data and codes for degree of emphasis are produced from review and coding of the standards by a team of education specialists for the subject that are trained to use the SEC frameworks and analysis procedures.

### **SEC Content Analysis: State Standard compared to Common Core Standard— Mathematics Example**

[next page]

Alignment Overall: 0.199  
Coarse Grain Alignment: 0.5887



Administration Year:   
 Sample Selection:  ·  ·   
 Report By:  ·  ·

Show Data Tables

Count: 1

1

	KS Stnds Gr. 6	CCSS Gr. 6
<input type="checkbox"/> <u>Number Sense / Properties / Relationships</u>	[Light Yellow] [Red] [Dark Orange] [Orange] [Light Yellow]	[Orange] [Red] [Dark Orange] [Light Yellow] [Light Yellow]
<input type="checkbox"/> <u>Operations</u>	[White] [Orange] [White] [Light Yellow]	[Light Yellow] [Red] [Light Yellow] [White] [Light Yellow]
<input type="checkbox"/> <u>Measurement</u>	[Light Yellow] [Orange] [Light Yellow] [White] [White]	[Light Yellow] [Orange] [Light Yellow] [Light Yellow] [Orange]
<input type="checkbox"/> <u>Consumer Applications</u>	[White] [White] [White] [White] [White]	[White] [White] [Light Yellow] [White] [White]
<input type="checkbox"/> <u>Basic Algebra</u>	[Light Yellow] [Red] [Orange] [Orange] [Light Yellow]	[Orange] [Red] [Orange] [Light Yellow] [Orange]
<input type="checkbox"/> <u>Advanced Algebra</u>	[White] [White] [White] [White] [White]	[White] [White] [White] [White] [White]
<input type="checkbox"/> <u>Geometric Concepts</u>	[Red] [Orange] [Orange] [Light Yellow] [Light Yellow]	[Light Yellow] [Light Yellow] [Light Yellow] [White] [Light Yellow]
<input type="checkbox"/> <u>Advanced Geometry</u>	[White] [White] [White] [White] [White]	[White] [Light Yellow] [Light Yellow] [White] [Light Yellow]
<input type="checkbox"/> <u>Data Displays</u>	[White] [Light Yellow] [Light Yellow] [Light Yellow] [Light Yellow]	[White] [Orange] [White] [White] [White]
<input type="checkbox"/> <u>Statistics</u>	[White] [Orange] [Light Yellow] [Light Yellow] [Light Yellow]	[Orange] [Light Yellow] [Orange] [Light Yellow] [Light Yellow]
<input type="checkbox"/> <u>Probability</u>	[Light Yellow] [Orange] [White] [Light Yellow] [Light Yellow]	[White] [White] [White] [White] [White]
<input type="checkbox"/> <u>Analysis</u>	[White] [White] [White] [White] [White]	[White] [White] [White] [White] [White]
<input type="checkbox"/> <u>Trigonometry</u>	[White] [White] [White] [White] [White]	[White] [White] [White] [White] [White]
<input type="checkbox"/> <u>Special Topics</u>	[White] [Light Yellow] [White] [White] [White]	[White] [White] [White] [White] [White]
<input type="checkbox"/> <u>Functions</u>	[White] [White] [White] [White] [White]	[White] [White] [White] [White] [White]
<input type="checkbox"/> <u>Instructional Technology</u>	[White] [White] [White] [Light Yellow] [White]	[White] [White] [White] [White] [White]

Student Expectations  
 I. Memorize Facts, Definitions, Formulas  
 II. Perform Procedures  
 III. Demonstrate Understanding  
 IV. Conjecture, Analyze, Generalize, Prove  
 V. Solve Non-Routine Problems/Make Connections

I. II. III. IV. V.  
 I. II. III. IV. V.

**Comparison of Standards** sequence of steps:

**1. Comparing content topics:**

- Reviewing the chart on the left, what topics are emphasized by my existing state standards (identify 3-4 main topics)?
- What topics comprise the major emphasis of the Common Core State Standards that is now the goal of the transition process?
- What content topics have a high degree of alignment (or consistency)?
- What topics have low degree of alignment (or differences)

Expectations for learning (or cognitive demand) categories are listed along the bottom of both charts, and can be viewed by looking at the tiles across one topic row.

**2. Compare expectations for learning** (or cognitive demand) categories:

- What *expectations for learning* are emphasized in the prior state standards?
- Which of the expectations categories are emphasized by the Common Core State Standards?
- To what extent is there consistency in the expectations for learning between the state standards and the Common Core Standards?
- How would teaching differ with the expectations found with the Common Core Standards?

Education leaders and teachers can follow this sequence of steps to do an initial self-assessment of the degree of alignment between prior state standards and the Common Core Standards.

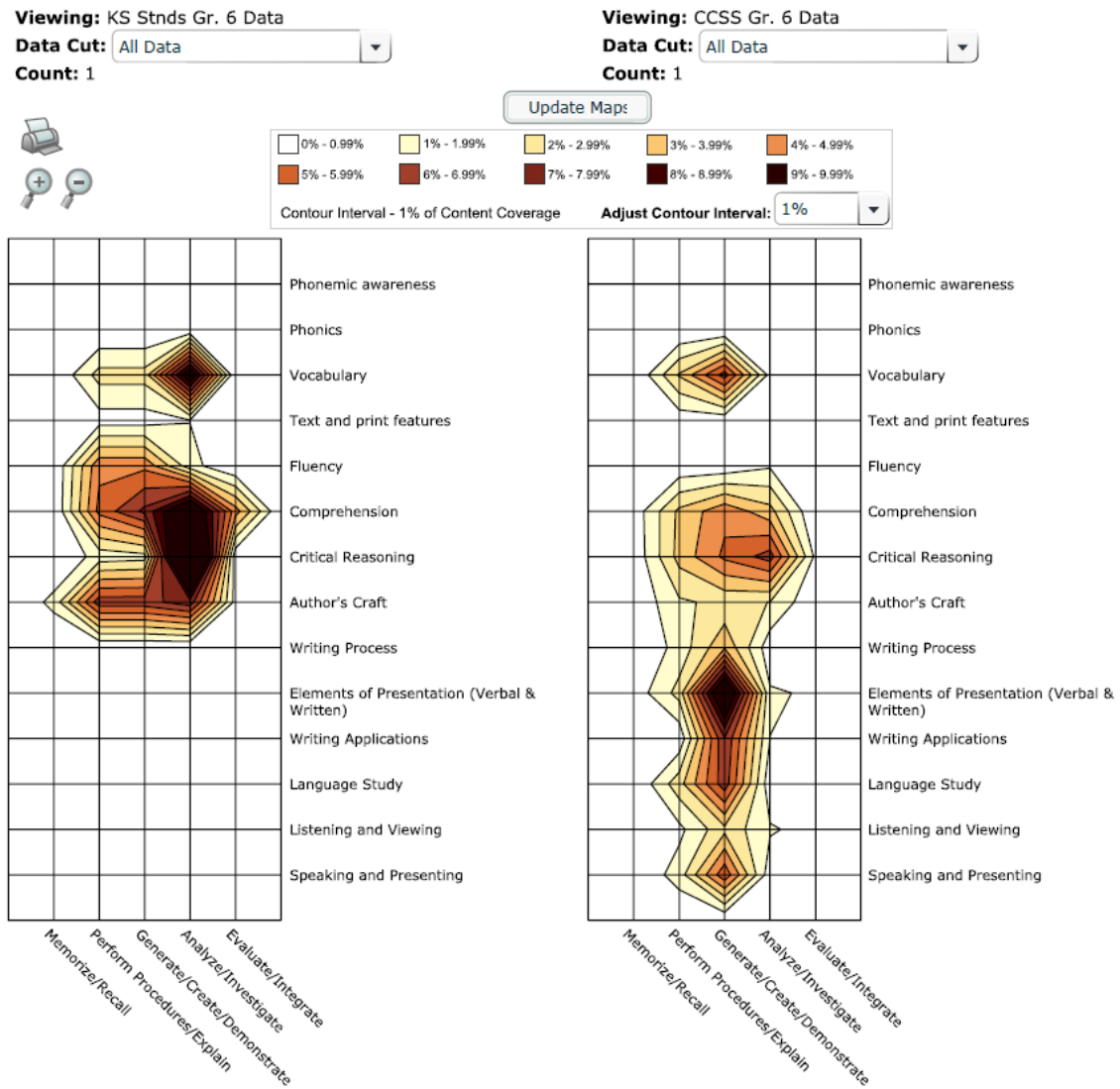
**3. Compare standards across Grades.** A third step would be to do a similar comparison for the analysis of adjacent grades (e.g., grade 5 Math or grade 7 Math). Then other questions can be asked:

- Are the content topics and expectations for these grades better aligned with the Common Core?
- Do several of the topics emphasized by the Common Core in grade 6 Math receive greater emphasis in earlier or later grades for the prior state standards? What are the implications of these differences in recommended order of instruction?
- What are the progressions for recommended student learning of the subject content over several grades found in the Common Core Standards?

**Note: Viewing Charts Online and Printing:** Some of the charts appear in the SEC online reporting system with a black background. When the charts are printed or saved in pdf format, the background is white. To capture a chart with a white background, go to print preview. Many of the charts for SEC member states have been downloaded in advance and saved for use by educators.

## English language arts example-- SEC Content Analysis: State Standard compared to Common Core Standard

In this example chart (using contour map format), the analysis of state standards is on the left and the Common Core standards for the same grade is shown on the right.



**4. Fine Grain Analysis.** The next set of charts on the following page display data for comparison of state standards to Common Core standards for grade 6 in one topic (Basic Algebra; or, ELA Writing applications).

- Under this main topic, which of the specific sub-topics (concepts) of Basic Algebra (or, ELA writing applications) are recommended by prior state standards for this grade? Which concepts are emphasized for this grade by the Common Core Standards?
- What expectations for learning are found for this topic in the prior state standards vs. Common Core?
- What are the implications of the differences in how Basic Algebra concepts are to be taught? (or, implications for teaching Writing applications)
- Now, compare Basic Algebra fine grain analysis for grade 6 with a similar chart for grade 5 and grade 7 (or beyond to grade 8 and 9).
- Looking across grades, what is the learning progression for basic algebra that is recommended? (What is the learning progression for teaching Writing applications?)

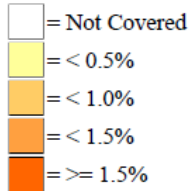
After a group of educators have reviewed individually or in pairs a set of charts for several grades or fine charts for several key topics, the group should carry out a discussion of their findings. Then the group consensus results can be used to develop ideas for further analysis or in-depth interpretation of the Common Core Standards, and development of strategies for working with teachers to move curriculum and instruction in the directions recommended by these Standards. The same sequence of steps for comparison and analysis described here for Math grade 6 can be used for English language arts and any of the grades for which standards are analyzed and reported.

**Note on SEC Collaborative and use of Surveys data:** The SEC Collaborative project has developed a complete guide for analyzing and interpreting the range of types of data that are collected and reported through the Surveys of Enacted Curriculum. Data from the SEC can address a range of questions regarding classroom instructional practices, teacher preparation, homework, classroom conditions, and curriculum that is taught (see *SEC Self-Guided Tour of Data Charts, 2009*, [www.secsurvey.org](http://www.secsurvey.org).) All of states and districts using the SEC system to report data, either from content analyses of standards and assessments, or data from teacher surveys, are reported and accessed through the same website: [www.SEOnline.org](http://www.SEOnline.org).

# Fine Grain Chart -- Grade 6 Basic Algebra, State Standard compared to Common Core

Alignment Overall: 0.199

Alignment Re-centered: 0.3019



Administration Year:

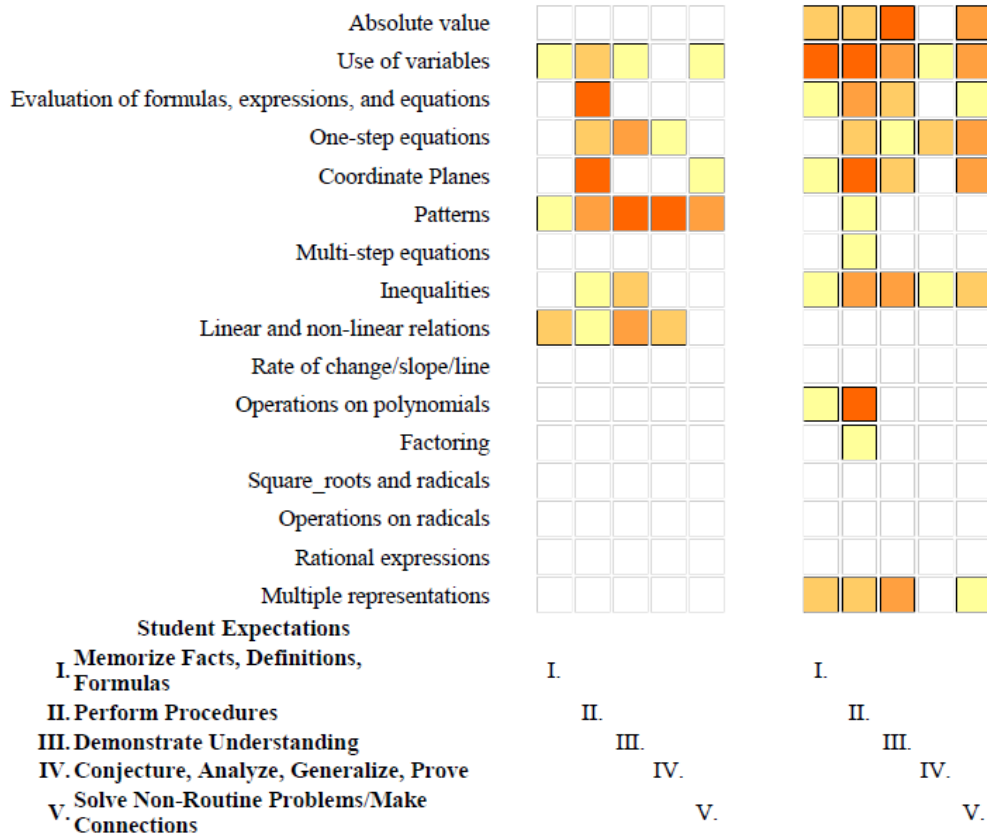
Sample Selection:  ·

Report By:  ·

Show Data Tables

Count: 1

1



# Fine Grain Chart – English language arts, Grade 6 Writing Applications topic: State Standard compared to Common Core

Viewing: KS Stnds Gr. 6 Data

Data Cut: All Data

Count: 1

Viewing: CCSS Gr. 6 Data

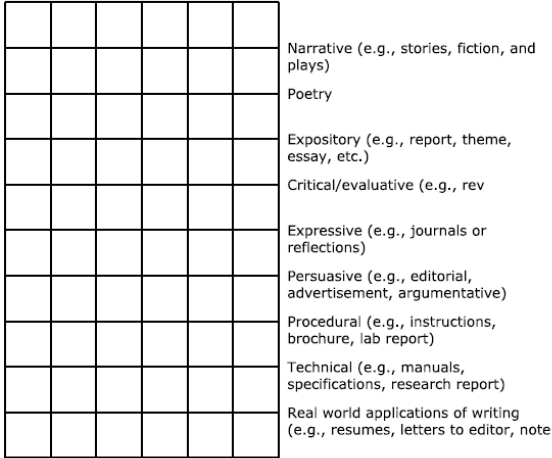
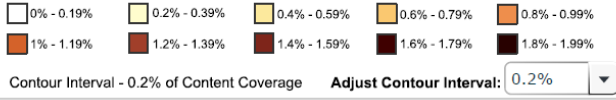
Data Cut: All Data

Count: 1



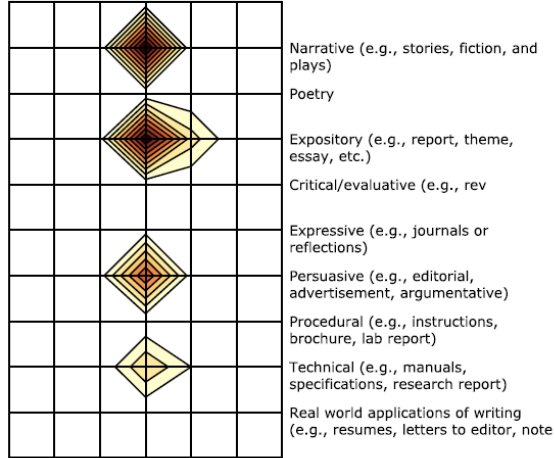
Update Maps

Return to Coarse Grai



Memorize/Recall  
Perform Procedures/Explain  
Generate/Create/Demonstrate  
Analyze/Investigate  
Evaluate/Integrate

Narrative (e.g., stories, fiction, and plays)  
Poetry  
Expository (e.g., report, theme, essay, etc.)  
Critical/evaluative (e.g., rev  
Expressive (e.g., journals or reflections)  
Persuasive (e.g., editorial, advertisement, argumentative)  
Procedural (e.g., instructions, brochure, lab report)  
Technical (e.g., manuals, specifications, research report)  
Real world applications of writing (e.g., resumes, letters to editor, note



Memorize/Recall  
Perform Procedures/Explain  
Generate/Create/Demonstrate  
Analyze/Investigate  
Evaluate/Integrate

Narrative (e.g., stories, fiction, and plays)  
Poetry  
Expository (e.g., report, theme, essay, etc.)  
Critical/evaluative (e.g., rev  
Expressive (e.g., journals or reflections)  
Persuasive (e.g., editorial, advertisement, argumentative)  
Procedural (e.g., instructions, brochure, lab report)  
Technical (e.g., manuals, specifications, research report)  
Real world applications of writing (e.g., resumes, letters to editor, note