INSTRUCTIONAL SUPPORTS AND RESOURCES

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August 16, 2018

OVERVIEW

- Participants will become familiar with instructional supports and resources for teachers of students with significant cognitive disabilities.
    - How to Teach State Standards to Students with Significant Cognitive Disabilities
    - Writing rubrics
    - NCSC Wiki resources

HIGH EXPECTATIONS

THE GOAL OF THE MULTI-STATE ALTERNATE ASSESSMENT (MSAA)

- To develop a system of assessments supported by curriculum, instruction, and professional development to ensure that students with the most significant cognitive disabilities achieve increasingly higher academic outcomes and leave high school ready for post-secondary options.

msaa
Multi-State Alternate Assessment

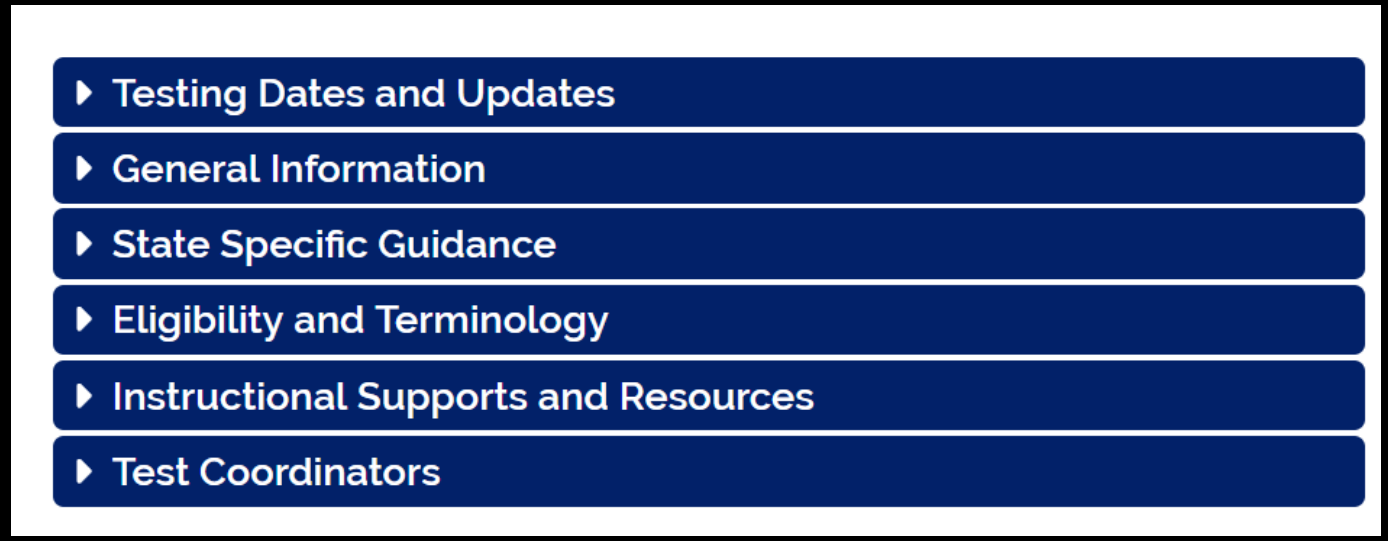
MSAA

- MSAA is designed to assess students with significant cognitive disabilities.
- This Alternate Assessment measures academic content that is aligned to and derived from the state's content standards.
- This test contains many built-in supports that allow students to take the test and communicate what they know and can do as independently as possible.
- MSAA is administered in the areas of ELA and Mathematics in Grades 3-8 and 11.

UNIVERSAL DESIGN FOR LEARNING

FOLLOWING THE PRESENTATION

- http://www.azed.gov/assessment//msaa/



HOW TO TEACH STATE STANDARDS TO STUDENTS WHO TAKE ALTERNATE ASSESSMENTS

- Browder, D., Wakeman, S., & Flowers, C. (2016). *How to teach state standards to students who take alternate assessments.* Minneapolis, MN: University of Minnesota, National Center and State Collaborative.
- http://www.azed.gov/assessment/files/2016/11/how-to-teach-state-standards-to-students-who-take-alternate-assessments.pdf

LIZ (PAGES 11-12) GRADE 10

- No speech, difficulty walking, short attention span
- Severe intellectual disability
- Learned social skills: walking to someone, showing materials, vocalizing a sound
- Can respond to two choice options
- Understands humor
- Emerging literacy and numeracy skills

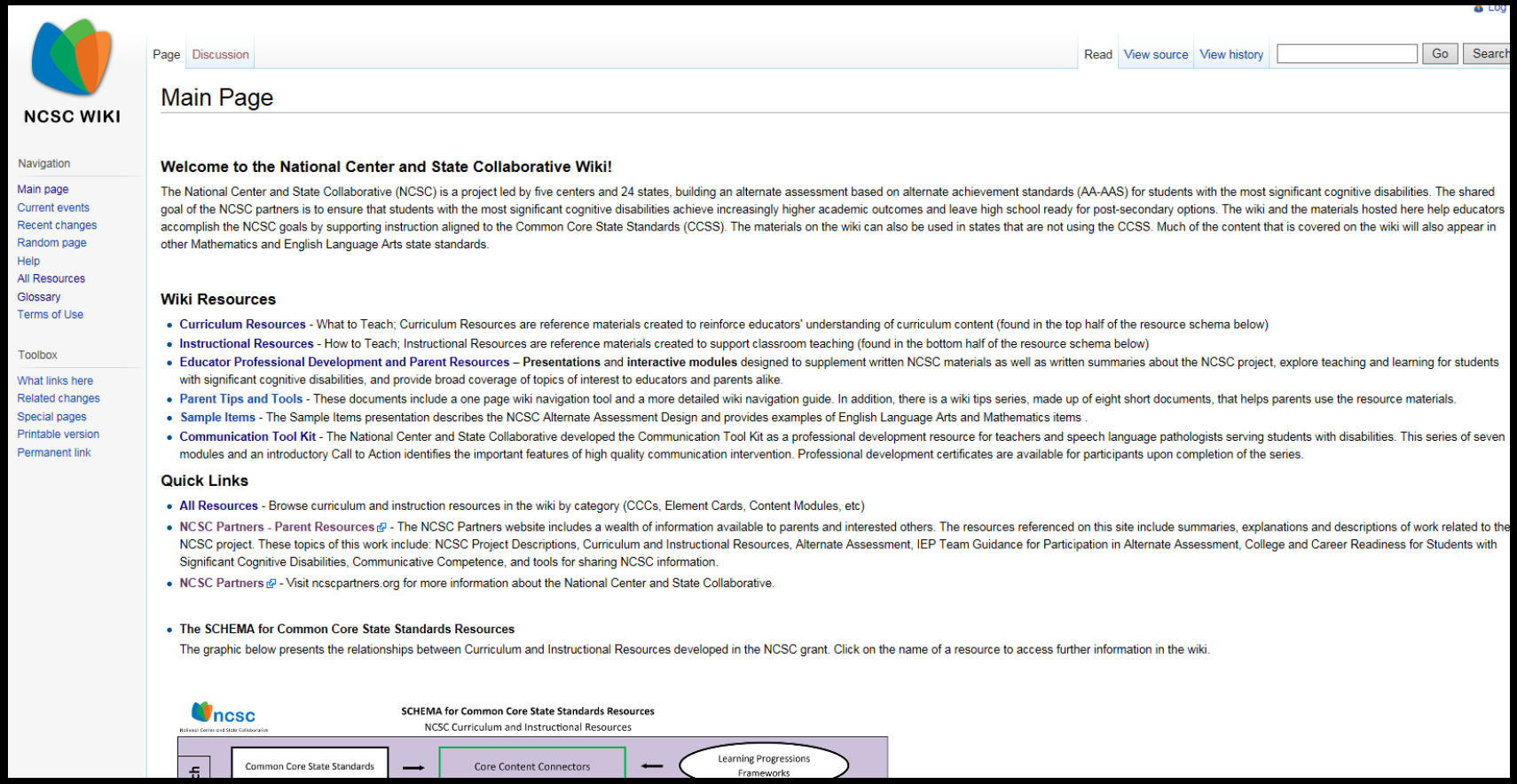
LIZ'S MATH INSTRUCTION (PAGES 21-22)

- Linear equations
  - Student responds to choices for the parts of the equation
  - Provide manipulatives
  - Use a number line for one-to-one correspondence

LIZ'S ELA INSTRUCTION (PAGES 39-40)

- Reading a Novel
  - Use pictures for the characters
  - Use pictures of the characters to answer comprehension questions

NCSC WIKI



NCSC WIKI

Navigation

Main page
Current events
Recent changes
Random page
Help
All Resources
Glossary
Terms of Use

Toolbox

What links here
Related changes
Special pages
Printable version
Permanent link

Page | Discussion | Read | View source | View history | Go | Search

Main Page

Welcome to the National Center and State Collaborative Wiki!

The National Center and State Collaborative (NCSC) is a project led by five centers and 24 states, building an alternate assessment based on alternate achievement standards (AA-AAS) for students with the most significant cognitive disabilities. The shared goal of the NCSC partners is to ensure that students with the most significant cognitive disabilities achieve increasingly higher academic outcomes and leave high school ready for post-secondary options. The wiki and the materials hosted here help educators accomplish the NCSC goals by supporting instruction aligned to the Common Core State Standards (CCSS). The materials on the wiki can also be used in states that are not using the CCSS. Much of the content that is covered on the wiki will also appear in other Mathematics and English Language Arts state standards.

Wiki Resources

- **Curriculum Resources** - What to Teach; Curriculum Resources are reference materials created to reinforce educators' understanding of curriculum content (found in the top half of the resource schema below)
- **Instructional Resources** - How to Teach; Instructional Resources are reference materials created to support classroom teaching (found in the bottom half of the resource schema below)
- **Educator Professional Development and Parent Resources – Presentations** and **interactive modules** designed to supplement written NCSC materials as well as written summaries about the NCSC project, explore teaching and learning for students with significant cognitive disabilities, and provide broad coverage of topics of interest to educators and parents alike.
- **Parent Tips and Tools** - These documents include a one page wiki navigation tool and a more detailed wiki navigation guide. In addition, there is a wiki tips series, made up of eight short documents, that helps parents use the resource materials.
- **Sample Items** - The Sample Items presentation describes the NCSC Alternate Assessment Design and provides examples of English Language Arts and Mathematics items .
- **Communication Tool Kit** - The National Center and State Collaborative developed the Communication Tool Kit as a professional development resource for teachers and speech language pathologists serving students with disabilities. This series of seven modules and an introductory Call to Action identifies the important features of high quality communication intervention. Professional development certificates are available for participants upon completion of the series.

Quick Links

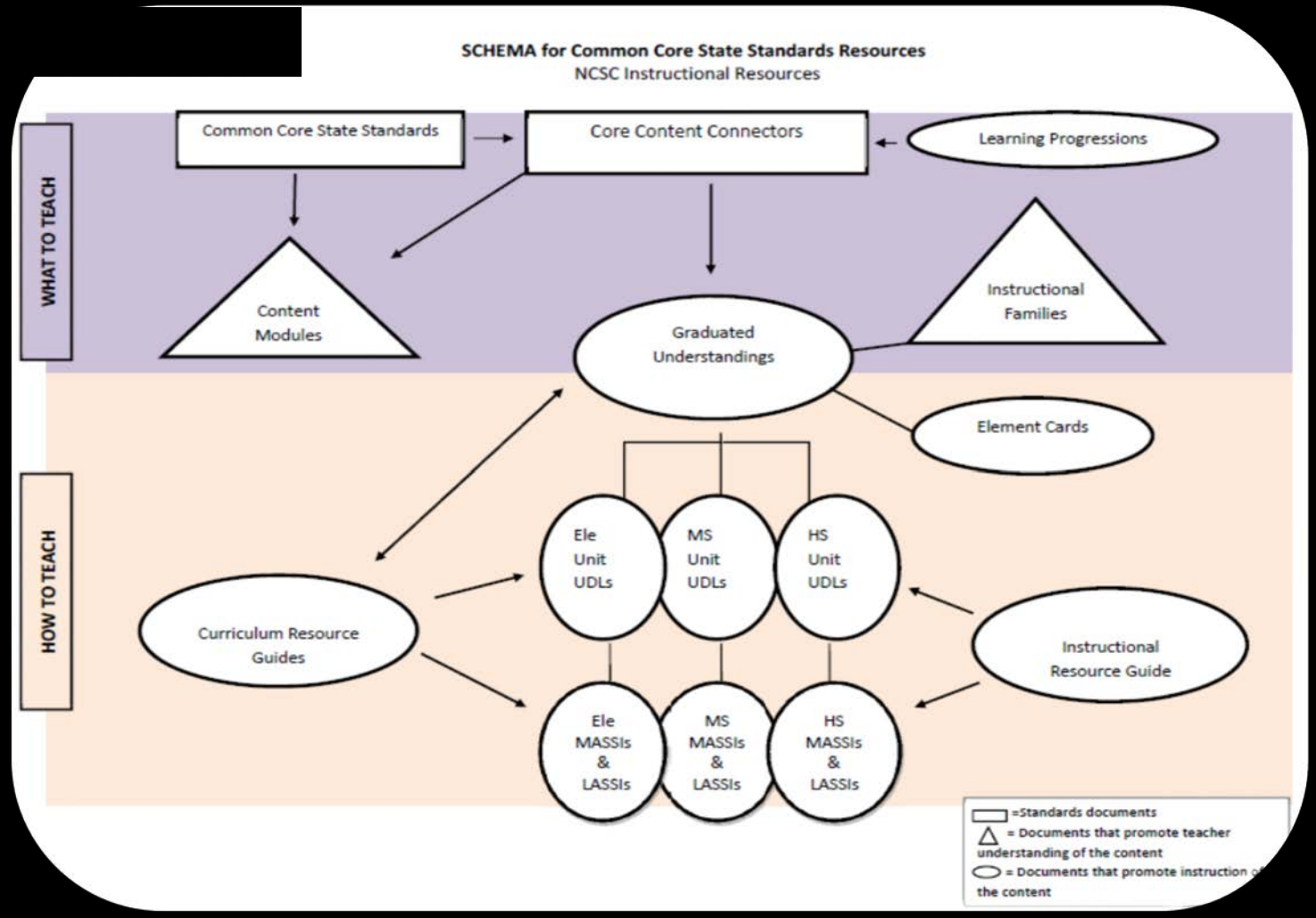
- **All Resources** - Browse curriculum and instruction resources in the wiki by category (CCCs, Element Cards, Content Modules, etc)
- **NCSC Partners - Parent Resources** - The NCSC Partners website includes a wealth of information available to parents and interested others. The resources referenced on this site include summaries, explanations and descriptions of work related to the NCSC project. These topics of this work include: NCSC Project Descriptions, Curriculum and Instructional Resources, Alternate Assessment, IEP Team Guidance for Participation in Alternate Assessment, College and Career Readiness for Students with Significant Cognitive Disabilities, Communicative Competence, and tools for sharing NCSC information.
- **NCSC Partners** - Visit ncscpartners.org for more information about the National Center and State Collaborative.

- **The SCHEMA for Common Core State Standards Resources**

The graphic below presents the relationships between Curriculum and Instructional Resources developed in the NCSC grant. Click on the name of a resource to access further information in the wiki.

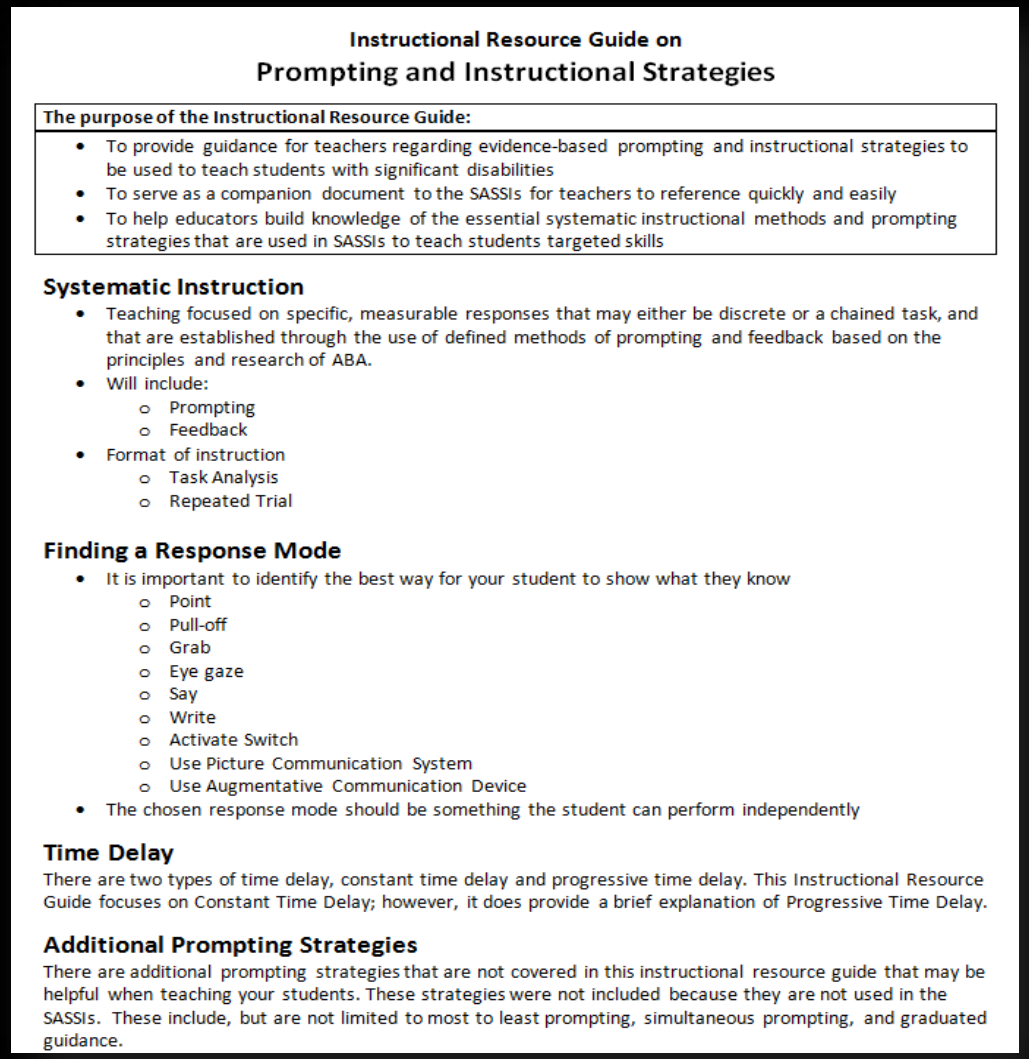
https://wiki.ncscpartners.org/index.php/Main_Page

NCSC INSTRUCTIONAL RESOURCES



INSTRUCTIONAL RESOURCE GUIDE

- This resource can be implemented immediately
- Focus on explicit instruction and best practices for teaching students with significant cognitive disabilities



Instructional Resource Guide on

Prompting and Instructional Strategies

The purpose of the Instructional Resource Guide:

- To provide guidance for teachers regarding evidence-based prompting and instructional strategies to be used to teach students with significant disabilities
- To serve as a companion document to the SASSIs for teachers to reference quickly and easily
- To help educators build knowledge of the essential systematic instructional methods and prompting strategies that are used in SASSIs to teach students targeted skills

Systematic Instruction

- Teaching focused on specific, measurable responses that may either be discrete or a chained task, and that are established through the use of defined methods of prompting and feedback based on the principles and research of ABA.
- Will include:
  - Prompting
  - Feedback
- Format of instruction
  - Task Analysis
  - Repeated Trial

Finding a Response Mode

- It is important to identify the best way for your student to show what they know
  - Point
  - Pull-off
  - Grab
  - Eye gaze
  - Say
  - Write
  - Activate Switch
  - Use Picture Communication System
  - Use Augmentative Communication Device
- The chosen response mode should be something the student can perform independently

Time Delay

There are two types of time delay, constant time delay and progressive time delay. This Instructional Resource Guide focuses on Constant Time Delay; however, it does provide a brief explanation of Progressive Time Delay.

Additional Prompting Strategies

There are additional prompting strategies that are not covered in this instructional resource guide that may be helpful when teaching your students. These strategies were not included because they are not used in the SASSIs. These include, but are not limited to most to least prompting, simultaneous prompting, and graduated guidance.

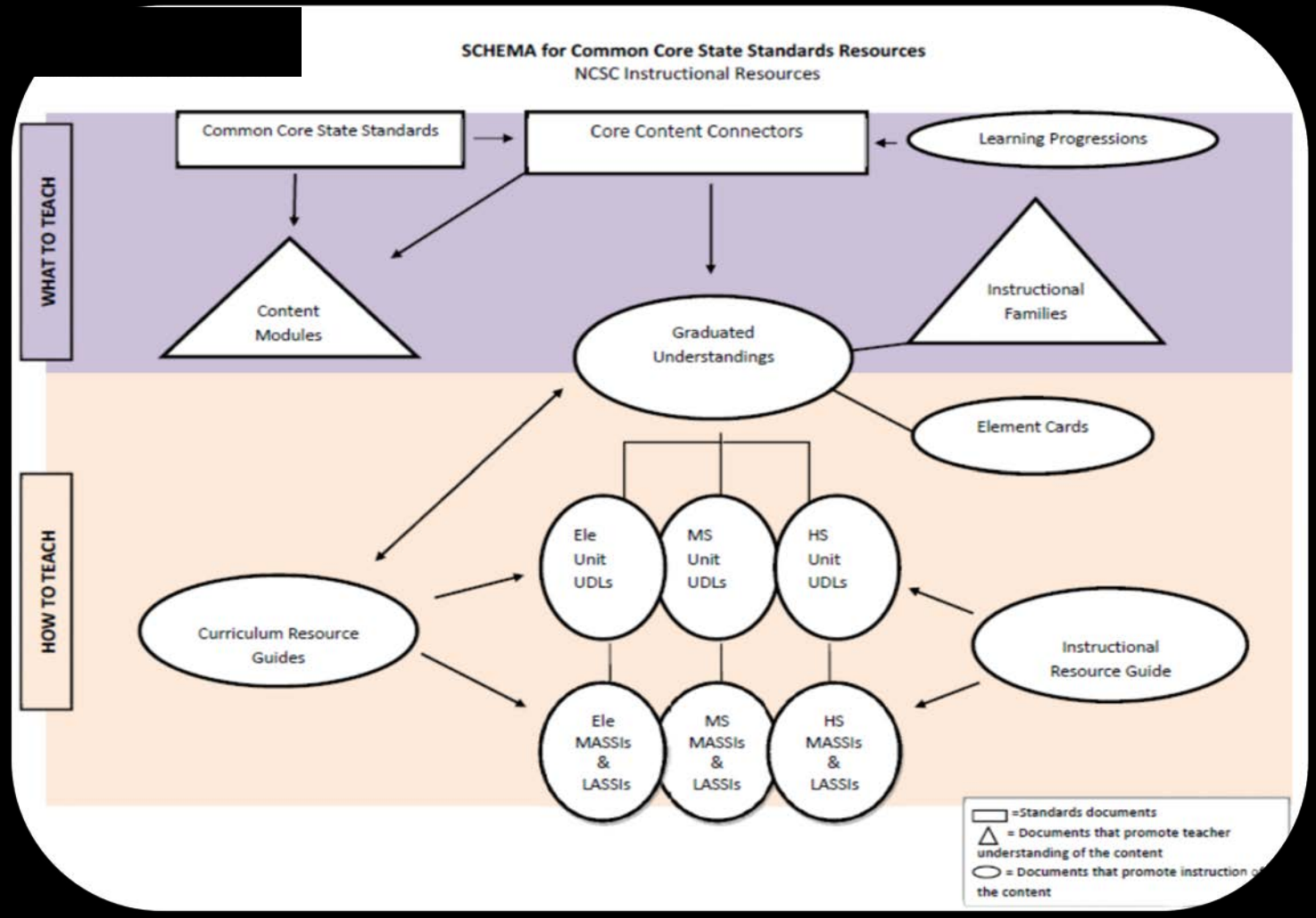
WHAT IS INCLUDED IN IR GUIDE?

- Overview of Systematic Instruction
- Importance of Finding a Response Mode
- Explanation of Instructional Strategies and “how to”
- Provides sample script for math and ELA skill for each instructional strategy
- Troubleshooting Q&A

Scripts for how to do:

- **Constant Time Delay (CTD)**
- **System of Least Prompts (LIP)**
- **Model, Lead, Test**
- **Example/Non-example Training**

NCSC INSTRUCTIONAL RESOURCES

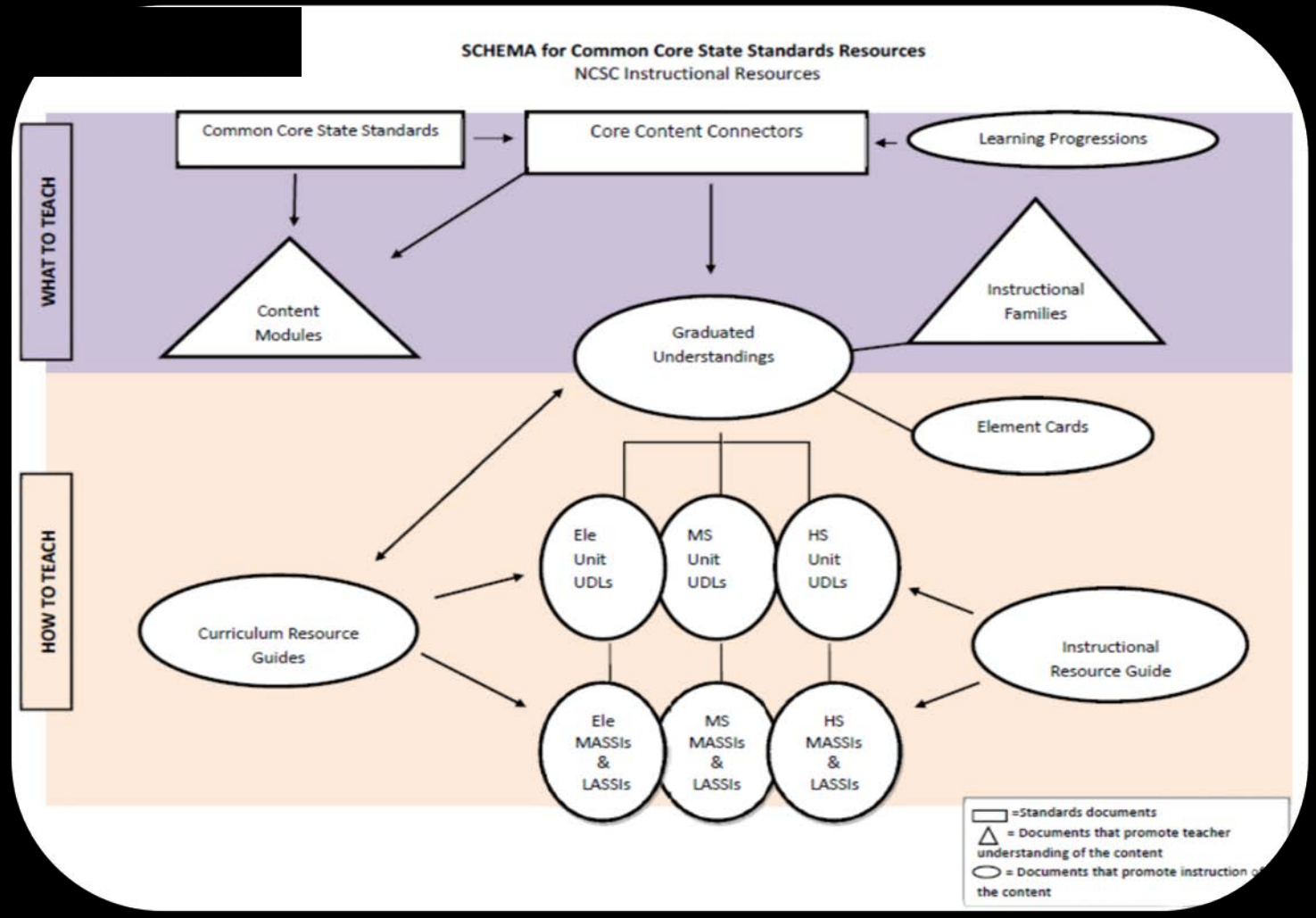


CORE CONTENT CONNECTORS (CCCS)

- Identify the most salient grade-level, core academic content in ELA and mathematics found in both the Common Core State Standards (CCSS) and the Learning Progression Framework (LPF);
- Illustrate the necessary knowledge and skills in order to reach the learning targets within the LPF and the CCSS;
- Focus on the core content, knowledge and skills needed at each grade to promote success at the next; and
- Identify priorities in each content area to guide the instruction for students in this population and for the alternate assessment.

- These are not alternate standards
- There is not a one to one correspondence for every state standard
- These are not a

NCSC INSTRUCTIONAL RESOURCES



GRADUATED UNDERSTANDINGS

- Utilized by teachers to:
  - Share a common language;
  - Plan multi-grade instruction for students who participate in the AA-AAS with a wide range of abilities and challenges;
  - Support developed instructional units that will include all students and will promote the use of Universal Design of Learning; and
  - Engage in collaborative discussion and delivery of instruction.

- Include Instructional Families and Element Cards.

GRADUATED UNDERSTANDINGS (GUS) AND INSTRUCTIONAL FAMILIES

Distribution of Instructional Families: Patterns, Relations and Functions

(K-4) Elementary School Learning Targets					(5-8) Middle School Learning Targets				(9-12) High School Learning Targets
E.PRF-1 *Use concrete, pictorial, and symbolic representations to identify, describe, compare, and model situations that involve change.*					***M.PRF-1*** *Describe and compare situations that involve change and use the information to draw conclusions:* • *Model contextual situations using multiple representations;* • *Calculate rates of change for real-world situations (constant)*				***H.PRF-1*** *Approximate, calculate, model, and interpret change:* • *Use graphical and numerical data resulting from complex situations;* • *Model complex real-world phenomena to make predictions and provide explanations*
E.PRF-2 *Give examples, interpret, and analyze repeating and growing patterns and functions involving the four basic operations*					***M.PRF-2*** *Give examples, interpret, and analyze a variety of mathematical patterns, relations, and explicit and recursive functions*				***H.PRF-2*** *Use trends and analyze a variety of mathematical patterns, relations, and explicit and recursive functions.*
Grade K	**Grade 1**	**Grade 2**	**Grade 3**	**Grade 4**	**Grade 5**	**Grade 6**	**Grade 7**	**Grade 8**	**HS**

Representing and Modeling Problems	Describing and Extending Patterns	Problem Solving and Using Variables	Proportional Relationships and Graphing

Instructional Families

GRADUATED UNDERSTANDINGS (GUS) AND INSTRUCTIONAL FAMILIES

Instructional Families

Overview of CCCs: Patterns, Relations and Functions

Describing and Extending Patterns	Problem Solving and Using Variables	Proportional Relationships and Graphing

(5-8) Middle School Learning Targets

M.PRF-1 *Describe and compare situations that involve change and use the information to draw conclusions:*

- *Model contextual situations using multiple representations;*
- *Calculate rates of change for real-world situations (constant)*

M.PRF-2 *Give examples, interpret, and analyze a variety of mathematical patterns, relations, and explicit and recursive functions*

Grade 5	Grade 6	Grade 7	Grade 8
5.PRF.1b1 Given 2 patterns involving the same context (e.g., collecting marbles) determine the 1st 5 terms and compare the values *5.OA.3*	6.PRF.1d1 Solve real-world single step linear equations *6.EE.7*	7.PRF.1g1 Solve real-world multi step problems using whole numbers *7.EE.3*	8.PRF.1g3 Solve linear equations with 1 variable *8.EE.7*
5.PRF.2a1 Generate a pattern that follows the provided rule *4.OA.5*	6.PRF.2a2 Use variable to represent numbers and write expressions when solving real-world problems *6.EE.6*	7.PRF.1g2 Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities *7.EE.4*	8.PRF.1e2 Represent proportional relationships on a line graph *8.EE.5*
5.PRF.1b2 When given a line graph representing two arithmetic patterns, identify the relationship between the two *5.OA.3*	6.PRF.2a3 Use variables to represent two quantities in a real-world problem that change in relationship to one another *6.EE.9*	7.PRF.2d1 Solve word problems leading to inequalities of the form $px + q > r$ or $px + q < r$, where p, q, and r are specific rational numbers *7.EE.4b*	8.PRF.1f2 Describe or select the relationship between the two quantities given a line graph of a situation *8.EE.5*
5.PRF.2b1 Generate or select a comparison between two graphs from a similar situation *5.OA-3*	6.PRF.1a2 Determine whether or not the quotient will increase or decrease based on the divisor *5.NF.5*	7.PRF.1e2 Represent proportional relationships on a line graph *7.RP.2b*	8.PRF.2c1 Given two graphs, describe the function as linear and not linear *8.F.3* *8.F.5*
5.PRF.1a1 Determine whether the product will increase or decrease based on the multiplier *5.NF.5*	6.PRF.1c1 Describe the ratio relationship between two quantities for a given situation *6.RP.1*	7.PRF.1f1 Use proportional relationships to solve multi step percent problems in real-world situations. *7.RP.3*	8.PRF.2e1 Distinguish between functions and non-functions, using equations, graphs or tables *No CCSS linked*
	6.PRF.1c2 Represent proportional relationships on a line graph *6.RP.2*	7.PRF.2a5 Use variables to represent two quantities in a real-world problem that change in relationship to one another *6.EE.9*	8.PRF.2e2 Identify the rate of change (slope) and initial value (y-intercept) from graphs *8.F.4*
	6.PRF.2a4 Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation *6.EE.9*	7.NO.2f4 Use a rate of change or proportional relationship to determine the points on a coordinate plane *7.RP.2d*	8.PRF.2e3 Given a verbal description of a situation, create or identify a graph to model the situation *8.F.5*

ELEMENT CARD: MATH

CCSS: 8.EE.5 Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways. *For example, compare a distance-time graph to a distance-time equation to determine which of two moving objects has greater speed.*

CCC:	8.PRF.1e2	Represent proportional relationships on a line graph

Strand: Patterns, Relationships and Functions

Family: Proportional Relationships and Graphing

Progress Indicator: *M.PRF.1e representing and computing unit rates associated with ratios of lengths, areas, and other quantities measured in like or different units*

Essential Understandings

Concrete Understandings:

- Recognize a positive relationship between two variables.

Representation:

- Graph a series of coordinates on a graph
- Identify given coordinates (x,y) as a point on a graph
- Identify the intercept(s) on a graph
- Understand concepts, vocabulary and symbols: coordinates, ordered pairs (x,y), intercept, grid, axis, point, proportion, line, slope

Suggested Instructional Strategies:

- Teach explicitly that a coordinate grid has two perpendicular lines, or axes, labeled like number lines.
- Teach explicitly how to recognize the relationship between y and x using the coordinates of several points (e.g., y increases as **x** increases; the ratio is the same for all values if they are directly proportional).
- Provide multiple examples of line graphs with different, labeled coordinates and slopes.
- Teach explicitly how to plot coordinates on a grid and draw the line.
- Teach explicitly how to define a line provided on a grid by multiple coordinates.
- Teach explicitly simple distance/time problems that illustrate how the rates of two objects can be represented, analyzed and described graphically.
- Task Analysis
  - Provide a series of proportional coordinates
  - Present a labeled graph
  - Identify the **x** coordinate and **y** coordinate and plot each point
  - List coordinates on a T-chart, (**x** in one column and **y** in the other) for each set of coordinates
  - State the proportional relations; _ : _

Supports and Scaffolds:

- Grid paper with raised perpendicular lines (horizontal and vertical lines) and points
- Models
- T-Chart, graphic organizer

ELEMENT CARD: ELA

Grades 3 – 5 Reading Element Card – Informational Text – *Identifying Text Structure*

Grade 6 students:	Grade 7 students:	Grade 8 students:
CCSS: 3.RI.5 Use text features and search tools (e.g., key words, sidebars, hyperlinks) to locate information relevant to a given topic efficiently.	**CCSS:** 4.RI.5 Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text.	**CCSS:** 5.RI.5 Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text.
PI: E.RI.h Locating relevant key ideas using text features (e.g., table of contents, diagrams, tables, animations) to answer questions and expand understanding.	**PI:** E.RI.h Locating relevant key ideas using text features (e.g., table of contents, diagrams, tables, animations) to answer questions and expand understanding.	**PI:** M.RI.b Using text structures (e.g., cause-effect, proposition-support), search tools, and genre features (e.g., graphics, captions, indexes) to locate and integrate information.
CCCs	**CCCs**	**CCCs**
3.RI.h1 Identify the purpose of a variety of text features. 3.RI.h2 Use text features (keywords, glossary) to locate information relevant to a given topic or question. 3.RI.h3 Use tools (e.g., sidebars, icons, glossary) to locate information relevant to a given topic.	4.RI.h1 Use text features (keywords, glossary) to locate information relevant to a given topic or question. 4.RI.h2 Use tools (e.g., sidebars, icons, glossary) to locate information relevant to a given topic.	5.RI.b3 Use search tools or text features as a means of locating relevant information.
Essential Understanding: Identify the text features (e.g., charts, illustrations, maps, titles). THEN Locate information in a variety of text features. THEN Identify tools (e.g., sidebars, icons, glossary) that help locate information.	**Essential Understanding:** Identify the text features (e.g., charts, illustrations, maps, titles). THEN Locate information in a variety of text features. THEN Identify tools (e.g., sidebars, icons, glossary) that help locate information.	**Essential Understanding:** Identify the text features (e.g., charts, illustrations, maps, titles). THEN Locate information in a variety of text features. THEN Identify tools (e.g., sidebars, icons, glossary) that help locate information.

Suggested Instructional Strategies:

Sort to Understand

- Use time delay to teach text features.*
- Provide text features (e.g., maps, charts, illustrations) to be sorted into categories.
- Use a System of Least prompts to provide feedback.*

Elements of the Instructional Families: Reading Informational Text, November 2013 12

Discuss to Understand

Compare Literary Text to Informational Text (compare/contrast)

- Provide students with a few examples of literary texts and a few examples of informational texts. (Identify each text's type for the students.)
- Invite the students to verbally explain the differences between the two types of texts. (e.g., how are the informational texts different from the literary texts? What do the informational texts have that the literary texts do not?).
- Explain what text features are (e.g., the captions tell us what a picture, illustration, chart or graph is about; timelines summarize important information chronologically).
- After completing the activity above, have students circle, highlight, or otherwise denote the text features found in the sample informational texts.
- Chart each type of text feature, and have students discuss the purpose of each.
- Provide students with an additional sample informational text.

Text divisions- ask students to identify how the text is organized and presented.

1. Lead students through the passage while reading aloud.
2. Have students look over the passage.
3. Highlight the special text features: title, headings, photos, etc.
4. Ask students to discuss the purpose and usefulness of the text features.
   - Why do you think the author included a (map, diagram, headings, etc.)?
   - What does the (selected text feature) do to help you as a reader?

Model to Understand

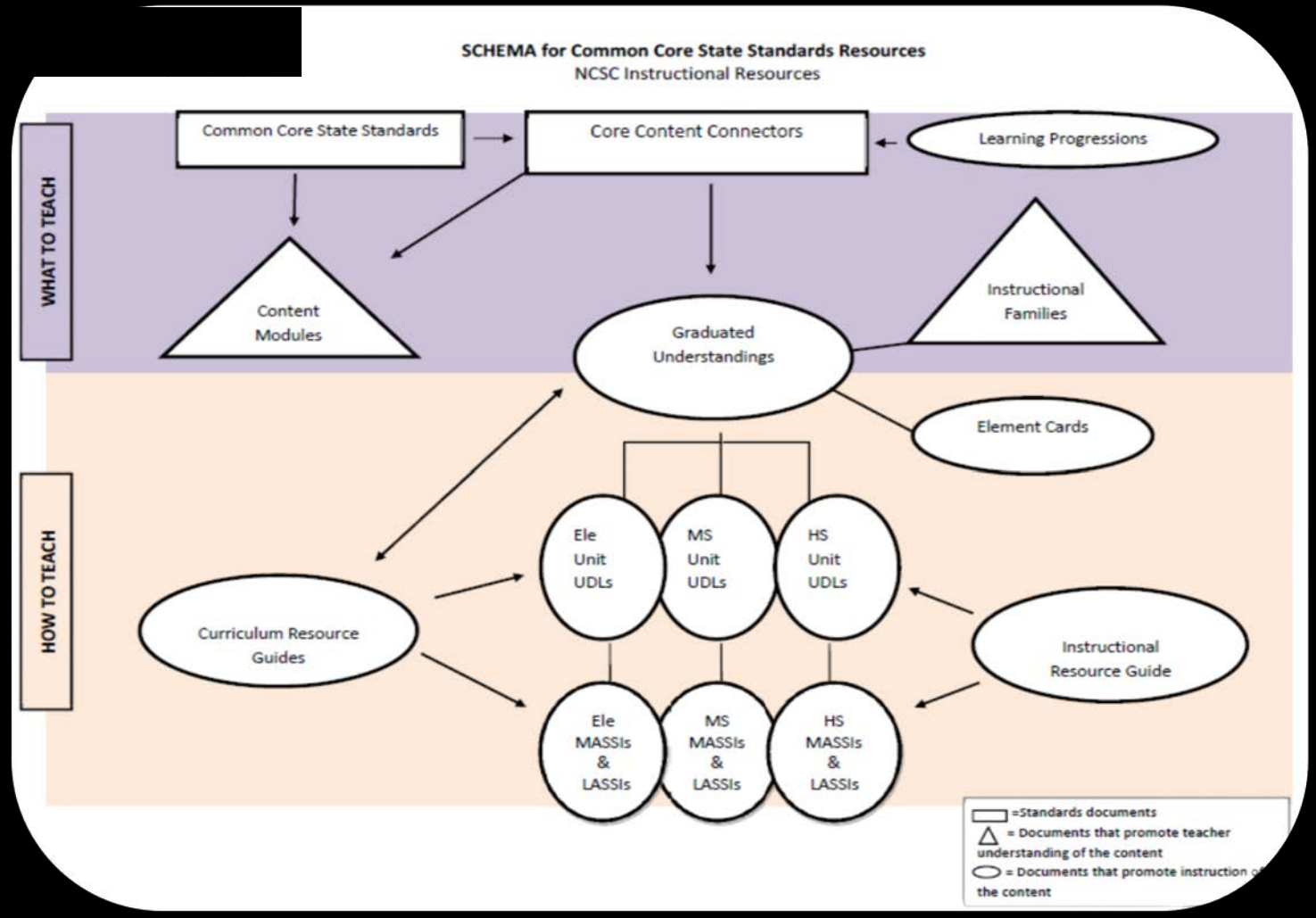
- Model how to use text features using the "Think Aloud" strategy (e.g., "The title tells me I'm going to read about a tower that might fall. Certain words are boldfaced — these are important, so I'll try to remember them. There is a photograph and a diagram — I can use these to get a clear picture in my mind of what I'm reading.").
- Use a System of Least prompts to teach students to: locate text features, locate signal words, find words in a glossary, locate title, use an index*
- Teach explicitly using a task analysis. For example, steps to finding a word in a glossary.
  1. Place the written word that needs to be located in a place where it can be seen after you turn to the glossary (if the word is in the text on another page, write the word on a separate piece of paper).
  2. Locate the glossary.
  3. Look at the first letter of the word to be located (e.g., "g"), use the guide word in the glossary to locate words with the same letter (e.g., "g".).
  4. Look at the second letter in the word to be located (e.g., "gr") and follow the words down the column until you locate the first word with the same first two letters.
  5. Continue with additional letters until the desired word is located.

Suggested Scaffolds and Supports

- Interactive whiteboard
- Teach using meaningful content from a variety of mediums (e.g., internet)
- Highlighted information within the chart, map, or diagram
- Pictures, objects or tactile representations to illustrate the key information on a chart, graph, or map
- Sentence strips that reflect the key information on a chart, graph, or map
- There are numerous text features. Select a few at a time that are priorities for the students (e.g., bolded text). Practice identifying the specific text feature(s) across multiple documents.

* Refer to Instructional Resource Guide for full descriptions and examples of systematic instructional strategies.

NCSC INSTRUCTIONAL RESOURCES



CURRICULUM RESOURCE GUIDES: MATHEMATICS AND ELA

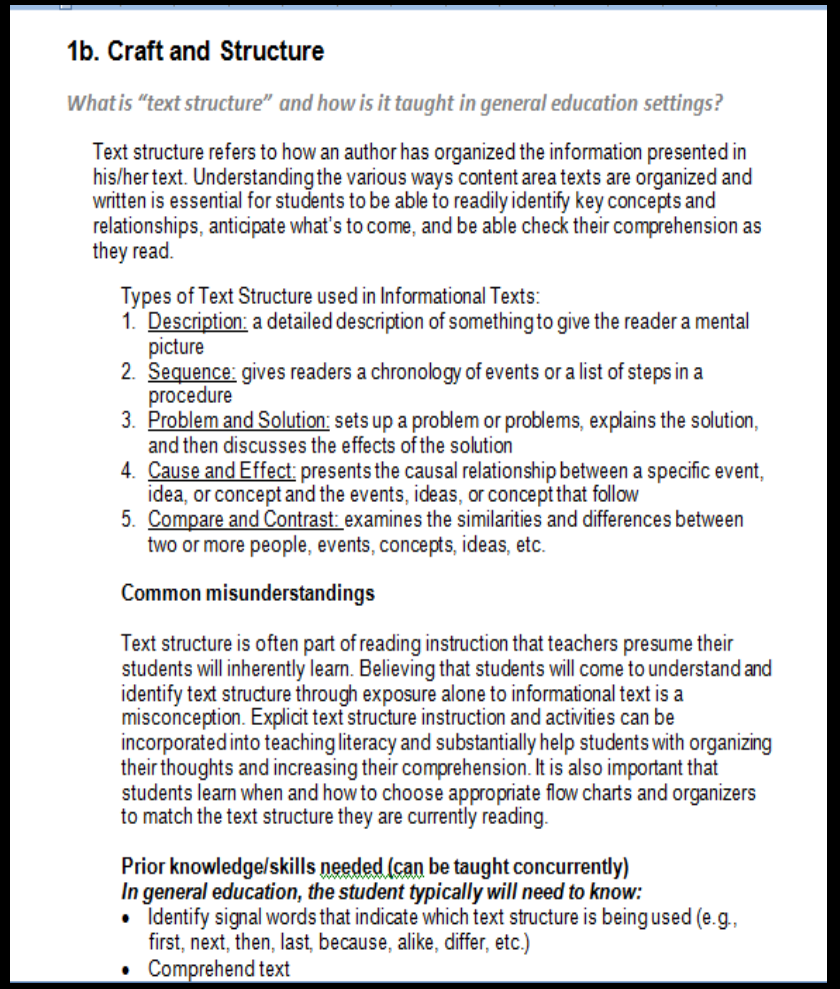
TOPICS: Data Analysis, Equations, Measurement and Geometry,

TOPICS: Reading Informational Texts and Vocabulary Acquisition and Use

- Provides guidance for teaching the standards to students with the most significant cognitive disabilities;
- Provides examples for differentiating instruction for a wide range of students in multiple grade levels; and
- Delineates the necessary skills and knowledge students need to acquire the content.

CURRICULUM RESOURCE GUIDES

- Content
  - Explanation of how topics are taught in a general education setting, common misunderstandings, and prior knowledge and skills needed
  - Activities general education teachers use
  - CCCs and CCSSs
  - Activities for use in real world contexts
  - Promoting college and career readiness
  - Incorporating UDL



1b. Craft and Structure

What is "text structure" and how is it taught in general education settings?

Text structure refers to how an author has organized the information presented in his/her text. Understanding the various ways content area texts are organized and written is essential for students to be able to readily identify key concepts and relationships, anticipate what's to come, and be able check their comprehension as they read.

Types of Text Structure used in Informational Texts:

1. Description: a detailed description of something to give the reader a mental picture
2. Sequence: gives readers a chronology of events or a list of steps in a procedure
3. Problem and Solution: sets up a problem or problems, explains the solution, and then discusses the effects of the solution
4. Cause and Effect: presents the causal relationship between a specific event, idea, or concept and the events, ideas, or concept that follow
5. Compare and Contrast: examines the similarities and differences between two or more people, events, concepts, ideas, etc.

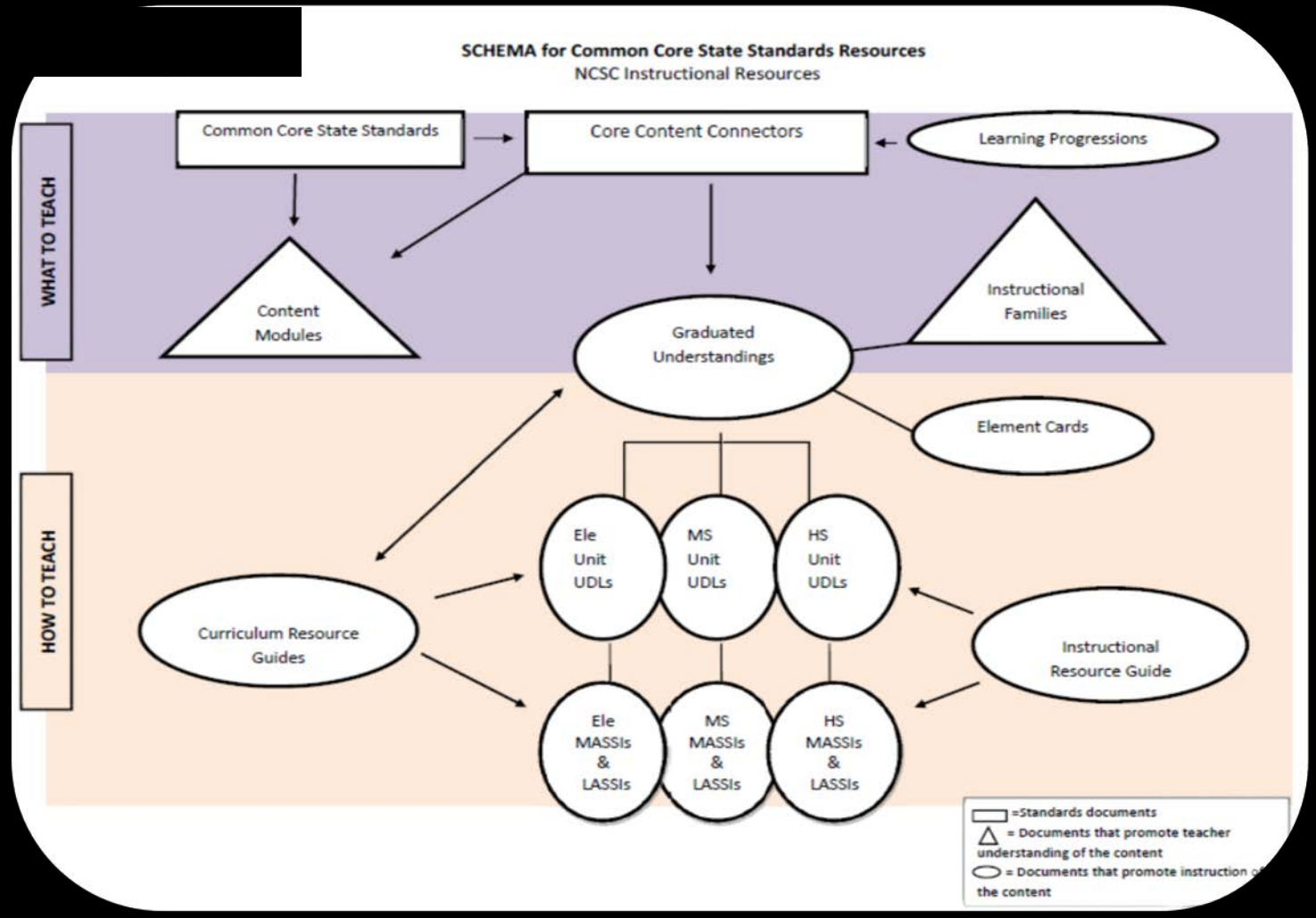
Common misunderstandings

Text structure is often part of reading instruction that teachers presume their students will inherently learn. Believing that students will come to understand and identify text structure through exposure alone to informational text is a misconception. Explicit text structure instruction and activities can be incorporated into teaching literacy and substantially help students with organizing their thoughts and increasing their comprehension. It is also important that students learn when and how to choose appropriate flow charts and organizers to match the text structure they are currently reading.

Prior knowledge/skills needed (can be taught concurrently)
In general education, the student typically will need to know:

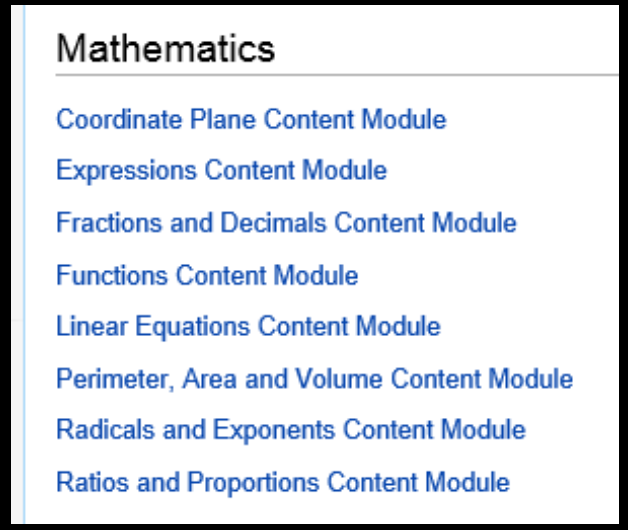
- Identify signal words that indicate which text structure is being used (e.g., first, next, then, last, because, alike, differ, etc.)
- Comprehend text

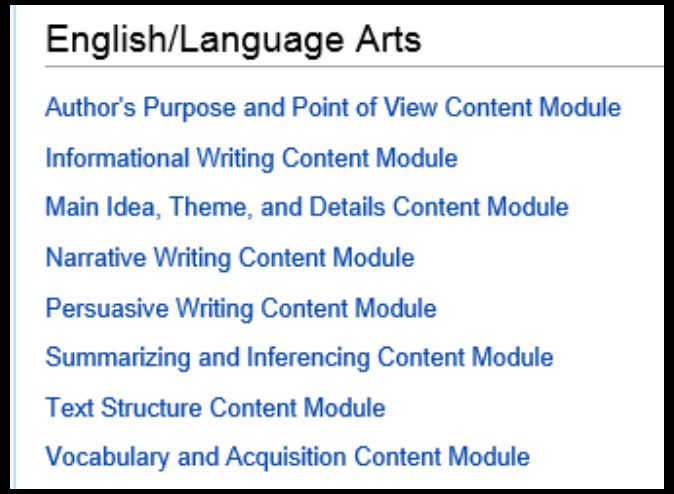
NCSC INSTRUCTIONAL RESOURCES



CONTENT MODULES

- Provides explanations and examples of the mathematic or ELA concepts contained in the CCSS that may be difficult to teach or unfamiliar to special education teachers;
- Promotes an understanding of Math and ELA concepts so a teacher can begin to plan how to teach the concepts to students.



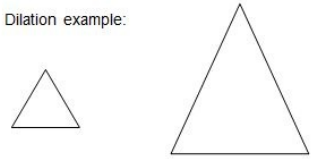


CONTENT MODULES

Ideas to support vocabulary learning

- Use visual representations

Dilation example:

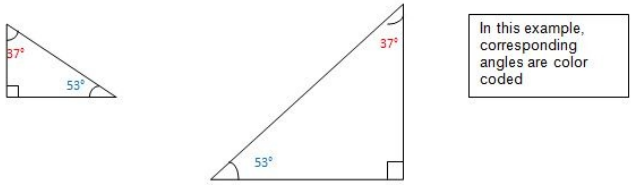


- Have students distinguish between a ratio and not a ratio

11 to 20	11:20	$\frac{11}{20}$	7	8.5
↑	↑	↑	↑	↑
ratio	ratio	ratio	Not a ratio	Not a ratio

If students need to compare ratios to symbols that are very different from a ratio, teachers can use shapes or other mathematical symbols (e.g., star, equal sign) to teach the discrimination

- Have students identify corresponding angles and sides when comparing two polygons



In this example, corresponding angles are color coded

- Review similar and not similar figures

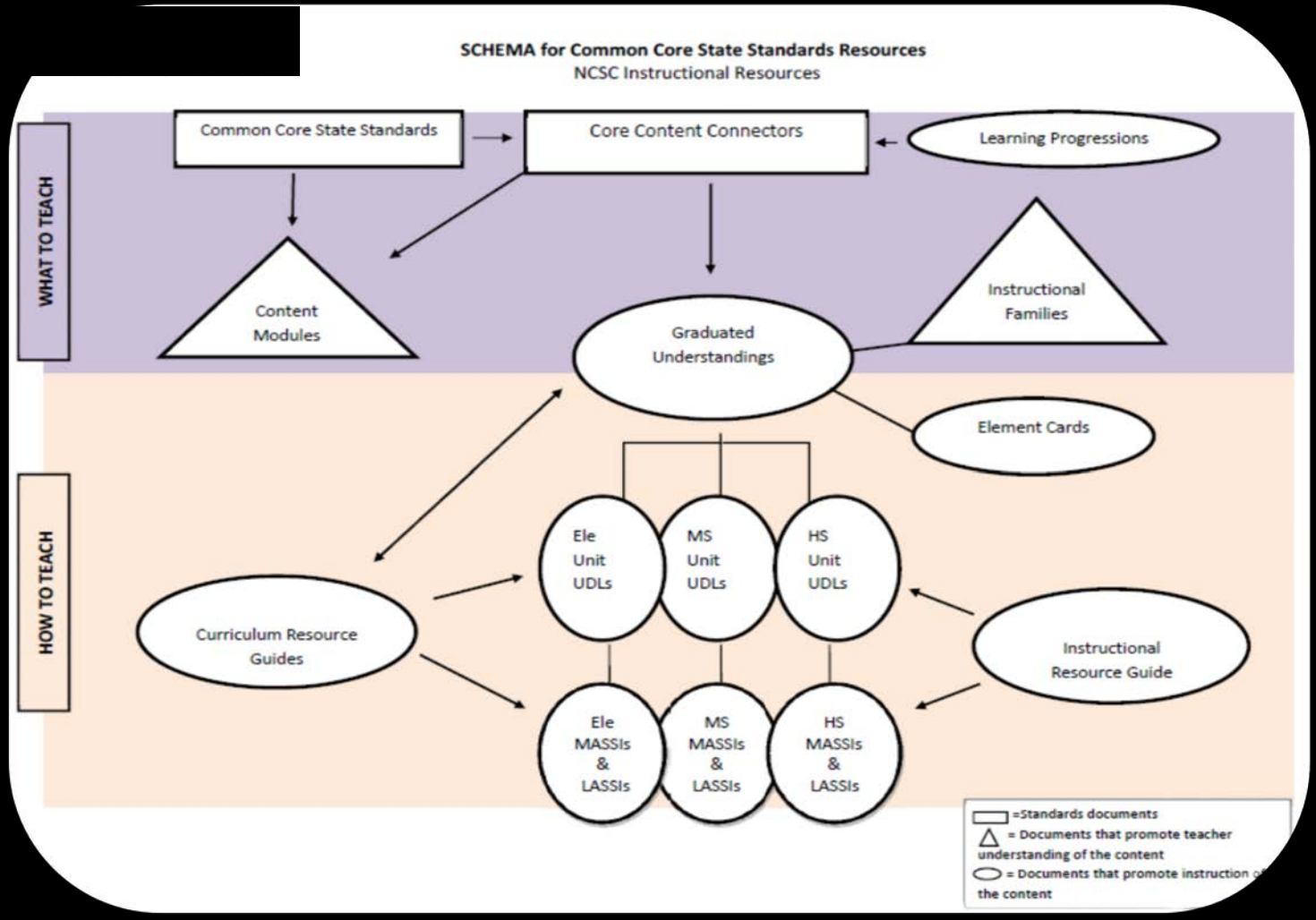
UNIVERSAL DESIGN FOR LEARNING

Some examples of options for teaching ratios and proportions to students who may present instructional challenges due to:


Many hot air balloons floating together

	Sensory Differences such as Blindness, Visual Impairment, Deafness, or Deaf/Blindness	Physical Disability or Motor Differences (such as weakness or motor planning difficulty)	Extremely limited evidence of experience/ skill or motivation/ attention	Lack of or extremely limited use of speech
Options for Representation	**Provide auditory options:** • Talking calculator • Text-to-speech software or voice recordings to read aloud story problems • Single message sequence voice-output devices to count aloud • Captioning software that presents auditory information visually **Provide tactile options:** • Object cues, using miniature objects or other tangible symbols to assist with problem comprehension and operations • Create numbers and symbols out of tactile materials • When demonstrating graphical linear representations of ratios, raise the grid by using glue over grid, puffy paint, or wiki sticks to represent proportional relationship (Students will need the grid raised to count x- and y-axis and another texture or height for the line representing the proportional relationship). **Provide visual and manipulative options to scaffold representation of concepts:**	**Reduce Physical Effort:** • Place materials on slant board or eye gaze array • Display flip chart, interactive white board or other teaching materials at student eye level • Student can scan an array of possible options and use a switch to select the answer • Use computer representation of figures that can be manipulated with switch • Demonstrating ratios verbally (e.g., 4: 3 can be demonstrated by saying beep beep beep beep: bam bam bam)	**Illustrate through multiple media:** • Utilize interactive whiteboard • Incorporate interactive websites that provide nonlinguistic tools for exploring math concepts: Illuminations http://illuminations.nctm.org/ActivitySearch.aspx Math Open Reference http://www.mathopenref.com/ There are many resources listed here: http://www.udlcenter.org/implementation/examples • Use a talking calculator	**Provide customized display of information:** • Consistent model by utilizing modes of communication used by students (point to symbols representing concepts, operations) • Teacher model competent use of AAC during instruction

NCSC INSTRUCTIONAL RESOURCES

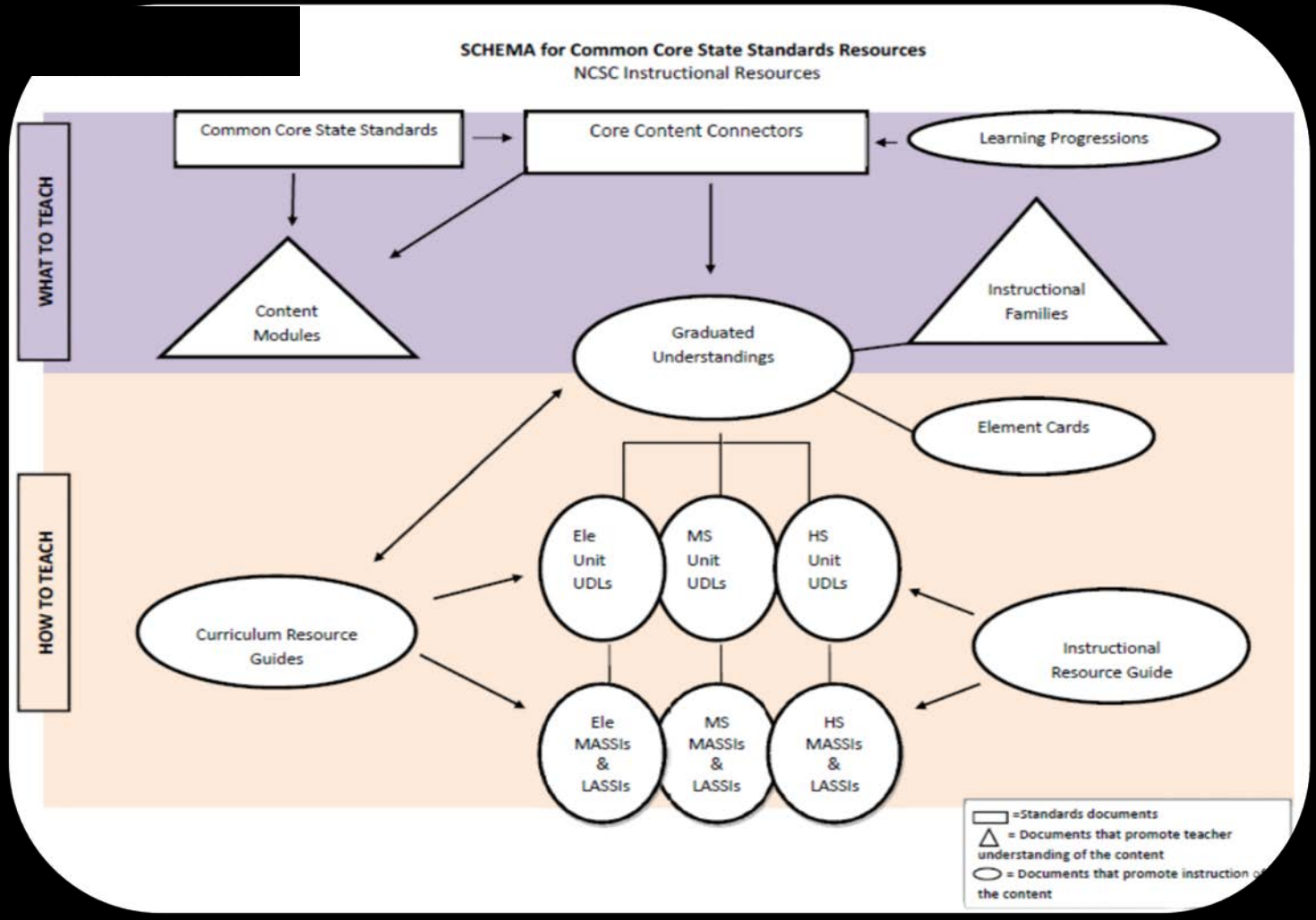


UDL INSTRUCTIONAL UNIT LESSONS

- There is one UDL Instructional Unit for each ELA and Math at the elementary, middle school, and high school levels.
- Resources and printable materials are provided. These are designed to be complete lessons.
- Each lesson includes objectives, essential questions, vocabulary, materials, lesson introduction, lesson body, practice, and closure.

Additional Considerations for Emerging Readers and Emerging Communicators
1. Provide picture and/or tactile and/or object representations of relevant vocabulary paired with the written word as it is mentioned during presentation or discussion for rectangle, area, perimeter as well as the meanings of each word. 2. Create math journals to record vocabulary, formulas, and notes. 3. Provide the formulas for area and perimeter as the concepts of each are discussed. 4. During discussion, provide picture representation of real world uses for area and perimeter. 5. As students work in small groups or pairs, ensure they have a means for gaining their group members' or partner's attention and a means for contributing to the discussion. 6. Students may use their math journals or a graphic organizer to collect/store information gathered during group. 7. To find area and perimeter, use grid paper, count/mark/tally each unit along the length of the figure to determine length and count/mark/tally each unit along the width of the figure to determine the width. 8. Use the formulas to determine area and perimeter. • A list of formulas may be used by the student as a reference. 9. Student may be presented with manipulatives of a unit and the rectangle drawn on grid paper. • Students determine area and perimeter by placing the manipulative units on each unit around the rectangle on the grid paper to demonstrate perimeter as well as within the rectangle to demonstrate area.

NCSC INSTRUCTIONAL RESOURCES



MASSIS AND LASSIS

- Provides examples of how to teach math and ELA concepts using meaningful activities;
- Incorporates evidence-based instruction from research;
- Provides teaching scripts for teachers who may not have extensive training in systematic instruction with a guide for instruction with graduating levels of difficulty;
- Can be embedded in general education lessons with a mixed ability group OR taught to a small group or an individual student; and
- Provide data sheets and skills tests.

NCSC WIKI SEARCH BOX

Search results

3.NO.1I1 Search

Content pages | Multimedia | Help and Project pages | Everything | Advanced

Create the page "3.NO.1I1" on this wiki!

Instructional Families: Number Operations
|rowspan="2" colspan="2" style="background-color:RGB(198,217,241)"|**3.NO.1I1**
Identify the number of highlighted parts (numerator) of a given representat
|style="background-color:RGB(198,217,241)"|**3.NO.1I1** Identify the number of highlighted parts (numerator) of a given representat
82 KB (10,912 words) - 18:50, 3 September 2015

Fractions and Decimals
||**3.NO.1I1** Identify the number of highlighted parts (numerator) of a given representat
44 KB (6,495 words) - 13:09, 16 September 2014

Core Content Connectors by Common Core State Standards: Mathematics 3rd Grade
||**3.NO.1I1** Identify the number of highlighted parts (numerator) of a given representat
20 KB (3,030 words) - 17:52, 23 July 2014

Element Cards Number Operations Fractions
||**3.NO.1I1**
78 KB (11,362 words) - 18:54, 29 May 2014

Fractions and Decimals Content Module
* **3.NO.1I1** Identify the number of highlighted parts (numerator) of a given representat
21 KB (3,188 words) - 18:11, 9 September 2015

MORE RESOURCES

Wiki Resources

- **Curriculum Resources** - What to Teach; Curriculum Resources are reference materials created to reinforce educators' understanding of curriculum content (found in the top half of the resource schema below)
- **Instructional Resources** - How to Teach; Instructional Resources are reference materials created to support classroom teaching (found in the bottom half of the resource schema below)
- **Educator Professional Development and Parent Resources** – **Presentations** and **interactive modules** designed to supplement written NCSC materials as well as written summaries about the NCSC project, explore teaching and learning for students with significant cognitive disabilities, and provide broad coverage of topics of interest to educators and parents alike.
- **Parent Tips and Tools** - These documents include a one page wiki navigation tool and a more detailed wiki navigation guide. In addition, there is a wiki tips series, made up of eight short documents, that helps parents use the resource materials.
- **Sample Items** - The Sample Items presentation describes the NCSC Alternate Assessment Design and provides examples of English Language Arts and Mathematics items .
- **Communication Tool Kit** - The National Center and State Collaborative developed the Communication Tool Kit as a professional development resource for teachers and speech language pathologists serving students with disabilities who do not or do not yet use oral speech. This series of seven modules and an introductory Call to Action identifies the important features of high quality communication intervention. Communication intervention is essential for students who currently do not use oral speech and do not have regularized communication systems to access the general curriculum in school. Professional development certificates are available for participants upon completion of the series.

Quick Links

- **All Resources** - Browse curriculum and instruction resources in the wiki by category (CCCs, Element Cards, Content Modules, etc)
- **NCSC Partners - Parent Resources** - The NCSC Partners website includes a wealth of information available to parents and interested others. The resources referenced on this site include summaries, explanations and descriptions of work related to the NCSC project. These topics of this work include: NCSC Project Descriptions, Curriculum and Instructional Resources, Alternate Assessment, IEP Team Guidance for Participation in Alternate Assessment, College and Career Readiness for Students with Significant Cognitive Disabilities, Communicative Competence, and tools for sharing NCSC information.
- **NCSC Partners** - Visit ncscpartners.org for more information about the National Center and State Collaborative.

WRITING PROMPT RUBRICS

- http://www.azed.gov/assessment/msaa/

WRITING Scoring Rubrics

Grade 3 – Grade 4 – Grade 5 – Grade 6 – Grade 7 – Grade 8 – Grade 11

msaa

Grade 3 Writing Scoring Rubric

Tier 3

Rubric Elements	Full Evidence	Partial Evidence	Limited Evidence	Unrelated Evidence
Organization – The narrative establishes a situation (i.e., activity and setting) and includes a character with relevant descriptive statements. The response provides a conclusion.	The narrative includes at a minimum: ☐ character and situation (activity and setting) ☐ two descriptions related to a character ☐ a conclusion that connects to the situation	The narrative includes at a minimum: ☐ character and situation (activity or setting) ☐ one description related to a character ☐ a conclusion that may not connect to the situation	The narrative includes at a minimum some evidence related to a character, details or descriptive words related to a character, situation, or conclusion.	There is no evidence of organization or the evidence is off topic.
Idea Development – The narrative includes a sequence of events that unfold naturally and develops the story using temporal words.	The narrative includes at a minimum: ☐ two sequenced events related to the situation ☐ both events include a detail ☐ appropriate use of temporal words that signal order of events	The narrative includes at a minimum: ☐ two events related to the situation ☐ one of the events includes a detail ☐ one temporal word that may or may not be used appropriately	The narrative includes at a minimum an event related to the situation.	There is no evidence of idea development or the evidence is off topic.
Conventions – Students use standard English conventions (subject/verb agreement).	The narrative includes more than one sentence and at a minimum: ☐ capitalization at the beginning of the majority of thought units ☐ end punctuation for more than one thought unit ☐ one simple sentence that contains a complete thought with subject/verb agreement Ex: "Dog runs" or "dog runs"	The narrative includes at a minimum two of the following: ☐ capitalization to begin one thought unit ☐ end punctuation for one thought unit ☐ one simple sentence with or without subject/verb agreement	The narrative includes at a minimum one use of Standard English conventions.	There is no evidence of Standard English conventions.

Revised January 2017

QUESTION AND ANSWER SESSION

ALTERNATE ASSESSMENT UNIT

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