

Tips for Using the NCSC Wiki to Support Your Child's Education: Instructional Families

The NCSC Curriculum and Instructional Resources are publicly available for free on the NCSC wiki at https://wiki.ncscpartners.org. They were designed to be used together to help educators teach grade-level aligned mathematics and English Language Arts (ELA) content to students with significant cognitive disabilities. The resources are based on the Common Core State Standards (CCSS). However, they 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 ELA state standards. If you need help navigating the NCSC wiki, you can access a one page navigation tool and a more detailed navigation guide, designed for parents, from the main page of the wiki.

This document is about the NCSC Instructional Families and how they can be used by parents to support your child's education. It is part of a series of documents based on seven of the NCSC curriculum and instructional resources. Using the NCSC curriculum and instructional resources at home and talking about the wiki with your child's teacher(s) are great starting points for increased parent-teacher collaboration.

The charts in the Instructional Families section of the NCSC wiki focus on groupings (families) of related skills within many mathematics, reading, and writing topics. For example, the four Instructional Families for Fractions/Ratios and Proportions (which fall under the broader mathematics topic of Numbers Operations) are "Representing," "Performing Operations," "Determining Equivalency," and "Problem Solving." Each Instructional Family consists of skills that start in early-mid elementary school and build on each other through the grades. These charts are quite complex. The important information for you to know about the charts is that they show why the foundational skills in early grades for each Instructional Family are so important and which skills are coming up as your child progresses to the next grade(s). This information can help with the development of a standards-based Individualized Education Program for your child.

Charts Showing Instructional Families across Grade-Spans

The following partial chart shows the emphasis on each Instructional Family for Fractions/Ratios and Proportions across the elementary and middle school grade

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spans. Each box under a grade represents a skill and is color-coded by Instructional Family so you can see how the complexity builds across grades.

INSTRUCTIONAL FAMILIES:							
Representing		Perf	orming Operations	Determining Equivalency		Problem Solving	
Grade 3	Grade 4		Grade 5	Grade 6	Grade	7	Grade 8

Charts Showing Instructional Families within Grade-Spans

The boxes in the mathematics Instructional Families charts, such as the partial chart shown below, describe the skills from each Instructional Family as they build across a few grades and combine within a single grade.

Representing	Performing Operations	Determining Equivalency	Problem Solving
Grade 5	Grade 6	Grade 7	Grade 8
	6.NO.1f1 Find a percent of a quantity as rate per 100. 6.RP.A.3c 6.NO.1f2 Write or select a ratio to match a given statement and representation 6.RP.A.1	7.NO.1h1 Identify an equivalent fraction, decimal and percent when given one of the three numbers 6.RP.A.3d	8.NO.2i3 Solve one step addition, subtraction, multiplication, division problems with fractions, decimals, and positive/negative numbers 7.NS.A.1d

The charts showing Instructional Families across grade-spans for reading and writing topics look different than for mathematics topics. Each one covers a single Instructional Family or a subset of skills for an Instructional Family across a grade-span. The chart below for the topic Reading Informational Text covers a subset of skills (Analyzing Across Texts) for the Instructional Family called "Integration of Knowledge and Ideas." The chart is for grades k-2 (the first symbol in front of the skill indicates the grade level).

RI9: Analyzing Across Texts				
K.RI.g3 With prompting and support, identify basic similarities in and differences between two texts on the same topic (e.g., imaginary or real bear; photo versus illustration of something not real). K.RI.9				
1.RI.g2 Identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures). 1.RI.g2				
2.RI.f1 Compare and contrast the most important points presented by two texts on the same topic. 2.RI.9				