



National Center and State Collaborative

Tips for Using the NCSC Wiki to Support Your Child's Education: Element Cards

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 Element Cards 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.

Links to Websites

At the beginning of the Element Card page for each topic under mathematics and each grade-span for a topic under ELA, there are some links to websites that parents may find useful to use at home.

Content of Element Cards

Element Cards promote understanding of how students with significant cognitive disabilities move toward the Common Core State Standards (although they would be useful with any standards your state is using). Each card focuses on one or more CCC and includes the related Common Core State Standard(s) and progress indicator(s). The Element Cards also provide information on the "essential understandings" for the CCC(s), which include content that is challenging, yet achievable, for many students with significant cognitive disabilities. The percentage of students who can do this level of work will increase as more students get the benefit of the NCSC curriculum and instructional resources starting in the early grades. In addition, the Element Cards provide suggested instructional strategies and supports for students.

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The Element Cards are intended to help teachers develop lessons that will include all students and promote Universal Design for Learning, though the information in the Element Cards can also help parents work with their children at home. There is not a corresponding Element Card for every CCC or group of CCCs. These resources are intended to be models. There will be a template of a blank Element Card available to teachers so they can develop their own Element Cards and share them on the wiki. However, there are enough Element Cards already on the wiki to provide a great deal of guidance to parents regarding the skills to be focused on and some strategies and supports to use.

Below is an example of one of the mathematics Element Cards for third grade. Each mathematics Element Card generally covers a single CCC. Each ELA Element Card covers multiple CCCs that appear across grade-spans (e.g., for the topic Reading Informational Text there is an Element Card for five CCCs about “using details to describe text and the main idea” from kindergarten to second grade).

<p>CCSS: 3.NF.2 Understand a fraction as a number on the number line; represent fractions on a number line diagram.</p> <p>a. Represent a fraction $1/b$ on a number line diagram by defined the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size $1/b$ and that the endpoint of the part based at 0 locates the number $1/b$ on the number line.</p> <p>b. Represent a fraction a/b on a number line diagram by marking off a lengths $1/b$ from 0. Recognize that the resulting interval has size a/b and that its endpoint locates the number a/b on the number line.</p>		
CCC:	4.NO.117	Order fractions on a number line
Strand: Number Operations (Fractions, Ration, Proportions)	Family: Determining Equivalency	
Progress Indicator: <i>E.NO.11 Identifying and locating fractions on the number line or as regions, or parts of a set or unit, and recognizing that whole numbers are a subset of rational numbers</i>		
Essential Understandings	<p>Concrete Understandings:</p> <ul style="list-style-type: none"> • Show understanding of how parts of a whole can be expressed as fractions using numbers. • Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into b equal parts. • Understand a fraction a/b as the quantity formed by a parts of size $1/b$. 	<p>Representation:</p> <ul style="list-style-type: none"> • Use a number line. • Demonstrate understanding of how the numerator and denominator each influence the placement of a fraction on a number line ($\frac{_}{_}$) • ($\frac{_}{_}$) • Understand the following concepts, symbols and vocabulary: "greatest to least" and "least to greatest."
<p>Suggested Instructional Strategies:</p> <ul style="list-style-type: none"> • Folding sentence strip or paper to have students generate a number line • Use fraction cards to place and order on a number line. • Explicitly teach that the denominator is the number of equal sections between 0 and 1. • Explicitly teach that the numerator is the number of equal sections from 0, e.g. - $3/5$ means the space between 0 and 1 has 5 equal sections and $3/5$ is at the end of the 3rd section from zero. 		
<p>Supports and Scaffolds:</p> <ul style="list-style-type: none"> • Start with 3rd grade concept of only ordering fractions with same numerator and same denominator Interactive whiteboard • Computer software • Assistive Technology • Number line with raised markers 		