

Pathway to the Common Core State Standards for Students with Significant Cognitive Disabilities

The NCSC Model for a Comprehensive System of Curriculum, Instruction and Assessment



National Center and State Collaborative

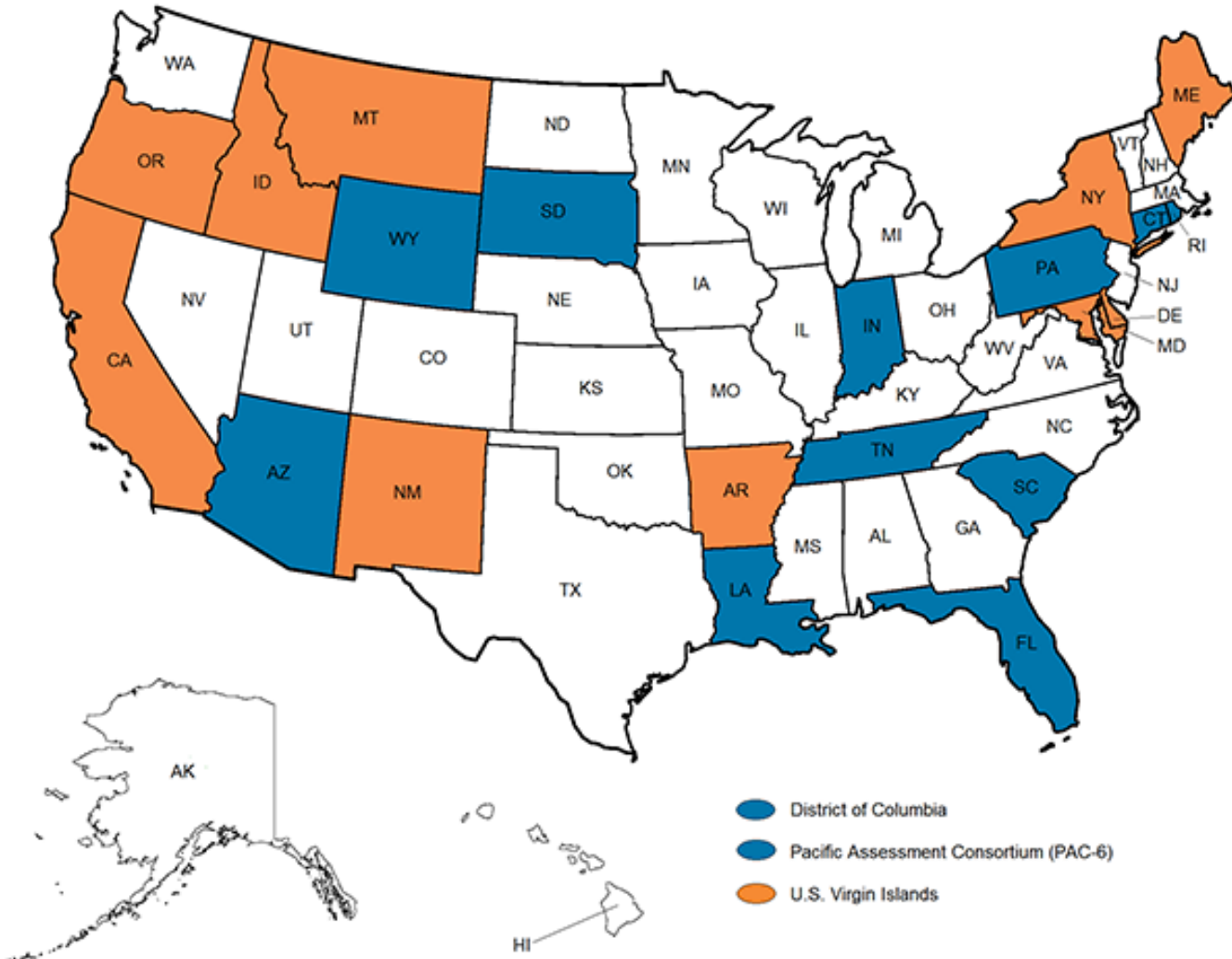
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NCSC Background

- The U.S. Department of Education awarded the National Center and State Collaborative (NCSC) a grant to develop a new alternate assessment in math and English Language Arts by 2014-15*
- 24 states and five national centers are working together in NCSC <http://www.ncscpartners.org/>
- NCSC is also developing curriculum/instructional resources based on Common Core State Standards (CCSS) that can be used in any state <https://wiki.ncscpartners.org>

*states may have different implementation timelines for NCSC assessment

NCSC Partner States



Communities of Practice (CoPs)

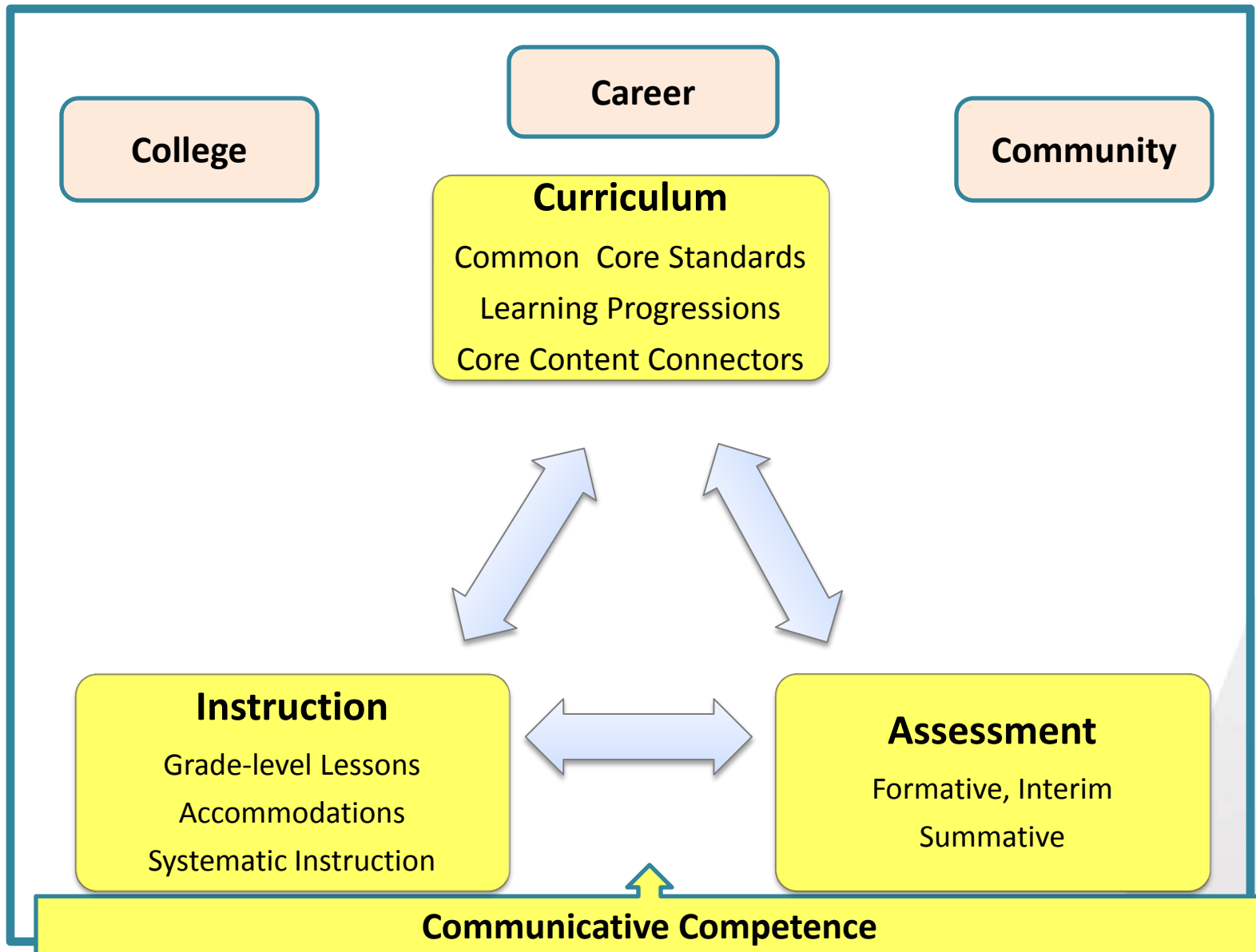
The CoPs are stakeholders across the partner states who are willing to assist in project activities:

- Lesson plan tryouts
- Item reviews
- Field tests and piloting of materials
- Standard setting
- Other

National Center and State Collaborative Grant: A Systems Approach

Building an assessment **system** based on research-based understanding of:

- Technical quality of Alternate Assessment design
- Formative and interim uses of assessment data
- Summative assessments
- Academic curriculum and instructional resources for students with significant cognitive disabilities
- A focus on communicative competency
- Effective professional development



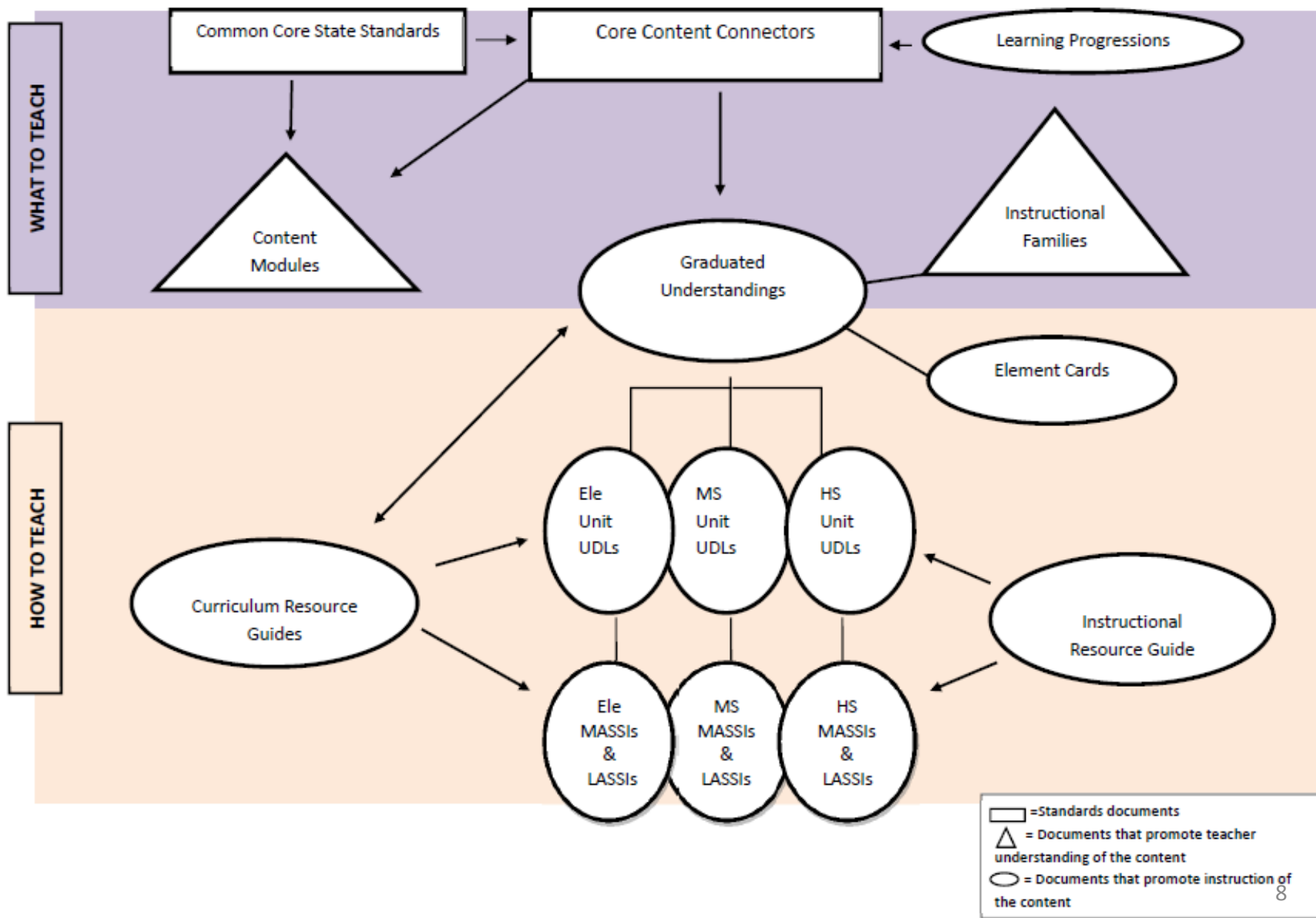
Cross Walking College and Career Readiness



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- All kids
 - Key Cognitive Strategies
 - Problem solving, reasoning, analysis, interpretation, critical thinking
 - Key Content
 - Reading, Math, Science, Social Studies
 - Academic Behaviors
 - Self monitoring, time management, using information resources, social interaction skills, working in groups
 - Contextual Skills and Awareness
 - Seeking help with admissions, procedures, career development
 - Students with Significant Cognitive Disabilities
 - Academic Access
 - Career Development
 - Social Network
 - Self Determination
 - Integration with College Systems & Practices
 - Coordination and Collaboration
- » (Conley, 2007)

SCHEMA for Common Core State Standards Resources NCSC Instructional Resources



Learning Progressions Framework (LPF)

- Research shows that in order to make academic progress through the grades and get more sophisticated understanding of the content, there is a typical path that learning takes
- The LPF shows the steps on that path—the essential core concepts and processes of a discipline sometimes called “the big ideas”

Hess, Karin K., (December 2011). Learning Progressions Frameworks Designed for Use with the Common Core State Standards in English Language Arts & Literacy K-12

Core Content Connectors (CCCs)

- Using the LPF, NCSC identified the “big ideas” from Common Core State Standards needed to make progress through the grades
- These “big ideas” were then broken down into more frequent benchmarks called CCCs that provide a pathway to the CCSS-not extended standards
- CCCs are the basis for the assessment, but the starting point for instruction

Learning Progression Framework

Curriculum Application

Lesson 5



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Apply formulas

- ✓ Solve word problems using perimeter and area where changes occur to the dimensions of a figure

Fractions

- ✓ Partition circles and rectangles into two and four equal parts
- ✓ Partition shapes into equal parts with equal area

Area

- ✓ Use addition to find the perimeter of a rectangle
- ✓ Use tiling and multiplication to determine area

Basic operations

- ✓ Addition
- ✓ Subtraction
- ✓ Multiplication
- ✓ Division

Part to Whole

- ✓ Partition circles and rectangles into two equal parts

Graphing

- ✓ Locate the x and y axis on a graph
- ✓ Locate points on a graph
- ✓ Use order pairs to graph given points

Area

- ✓ Find area of quadrilaterals
- ✓ Find area of plane figures and surface area of solid figures (quadrilaterals)
- ✓ Describe the changes in surface area, area, and volume when the figure is changed in some way (e.g., scale drawings)

Solve Linear Equations

- ✓ Solve a linear equation to find a missing attribute given the area, surface area, or volume and the other attribute

Ratio & Proportion

- ✓ Solve problems that use proportional reasoning with ratios of length and area
- ✓ Describe the changes in surface area, area, and volume when the figure is changed in some way (e.g., scale drawings)

CCCs = that connect skills

CCCs=Sub-skills that develop conceptual understanding

CCCs =Prerequisite knowledge or emergent skills

Content Modules

- Online multimedia resources
- Provide teachers with a deeper understanding of content to support effective planning, teaching, and learning
- Include sample universally designed general education lesson plans
- Describe potential adaptations and modifications for designing materials and instruction

Graduated Understandings

- **Instructional Families:**
 - Provide educators with easily interpreted visual representations of the areas of curricular emphasis within and across grades; and
 - Reference the CCSS, the Learning Targets of the Learning Progression Frameworks and the Core Content Connectors.
- **Element Cards:**
 - Reference the CCSS, Core Content Connectors and Progress Indicators;
 - Define the Essential Understandings; and
 - Articulate suggested instructional strategies, supports and scaffolds.

Overview of CCCs: Data Analysis I:

Grade-span Learning Target from the Learning Progression Frameworks

(K-4)

- E.DPS-1** Gather and interpret data to answer questions related to a particular situation.
- Formulate questions, gather data, and build representations;
 - Identify and describe variation in data, and describe and compare shapes of distributions and measures of central tendency.

| Formulate Questions/ Plan Research | | Represent and Interpret Data | | Draw Conclusions from Data Collection | |
|---|--|--|--|--|--|
| Grades K-1 | | Grade 2 | | Grade 3 | |
| K.DPS.1a1 Select a question that is answered by the collected data K.CC.5 | | | | 4.DPS.1f2 Develop questions, make a plan for data collection <i>No CCSS linked</i> | |
| 1.DPS.1a2 Select questions that ask about "How many" and represent up to three categories that can be concretely represented 1.MD.4 | | 2.DPS.1a6 Identify up to 3 categories resulting from a selected question 1.MD.4 | | 3.DPS.1g1 Collect data, organize into picture or bar graph 3.MD.3 | |
| 1.DPS.1a3 Identify 2 categories resulting from a selected question 1.MD.4 | | 2.DPS.1a7 Analyze data by sorting into categories established by each question 2.MD.10 | | 3.DPS.1g2 Organize measurement data into a line plot 3.MD.4 | |
| 1.DPS.1a4 Analyze data by sorting into 2 categories; answer questions about the total number of data points and how many in each category 1.MD.4 | | 2.DPS.1a8 Interpret the number of points in each category <i>No CCSS linked</i> | | 3.DPS.1i1 Select the appropriate statement that describes the data representations based on a given graph (picture, bar, line plots) | |
| 1.DPS.1c1 Using a picture graph, represent each object/person counted on the graph (1:1 correspondence) 1.MD.4 | | 2.DPS.1c2 Organize data by representing categorical data on a pictorial graph or bar graph 2.MD.10 | | 3.DPS.1k1 Apply results of data to a real world situation | |
| 1.DPS.1d1 Interpret a picture graph and a line plot to answer questions about the data 1.MD.4 | | 2.DPS.1e1 Compare the values of the 2 categories of data in terms of more or less 1.MD.4 | | 4.DPS.1k2 Apply results of data to a real world situation 3.MD.4 | |
| | | 2.DPS.1e2 Compare the information shown in a bar graph or picture graph with up to 4 categories. Solve simple comparisons of how many more or how many less 2.MD.10 | | | |

Instructional Families for Data Analysis I (K-4)

Reference to related CCSS

Distribution of CCCs by Instructional Families an grade

Element Cards

| | | |
|---|---|--|
| CCSS: 1.MD.4 Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another | | |
| CCC: | 1.DPS.1 e1 | Compare the values of the 2 categories of data in terms of more or less |
| Strand: Data, Probability and Statistics | | Family: Draw Conclusions from Data Collection |
| Progress Indicator: E.DPS.1e describing and comparing data and beginning to identify what the data do or do not show (e.g., bar graphs, line plots, picture graphs) | | |
| Essential Understandings | Concrete Understandings: <ul style="list-style-type: none">• Can identify groups of objects in terms of more and less• Can match numbers from a graph to numbers on a number line | Representation: <ul style="list-style-type: none">• Identify and use the symbols for $<$, $>$, $=$ |
| | Suggested Instructional Strategies: <ul style="list-style-type: none">• Teach the concept of more or less using example, non-example; apply to data on graph• Use or create a graph that provides a visual of the values in each category such as a bar graph• Teach the concept of more or less using a number line | |
| Supports and Scaffolds: <ul style="list-style-type: none">• Number line• Snap cubes to create a concrete bar graph | | |

Curriculum Resource Guide

- Provides guidance for teaching the CCSS to students with the most significant cognitive disabilities
- Delineates the necessary skills and knowledge students need to acquire/master the content
- Provides examples for differentiating instruction for a wide range of students in multiple grade levels (including a UDL table)

UDL Units and Lessons

- Purpose: to model how to plan for ALL students from the onset of instructional planning using the principles of universal design for learning
- Promote inclusive instruction; show how students who participate in alternate assessment can be educated in general education classes
- Excellent for co-teaching and collaborative planning
- Are modified/adapted for Emerging Readers and Emerging Communicators

Math/ Language Activities for Scripted Systematic Instruction (MASSIs and LASSIs)

- Generally designed to be used with UDL Units
- Provide more intensive instruction on key concepts and symbols
- Incorporate evidence-based instruction from research, including faded prompting
- Provide teaching scripts for teachers who may not have a lot of training in systematic instruction, which uses carefully planned steps
- Can be embedded in general education lessons with a mixed ability group OR taught to a small group or an individual student.

Instructional Resource Guide

- Provides overview of systematic instruction
- Explains instructional strategies and faded prompts used in MASSIs and LASSIs
- Contains troubleshooting Q&A

Educator Response



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Sample quote:

“I have had the pleasure of observing several classrooms across the state of Indiana where NCSC materials are being implemented on a daily basis. Wow! The impact is powerful, students are responsive, and teachers are dedicated to increased academic achievement.”

Amy Howie, Project SUCCESS* Director

*Project SUCCESS is an Indiana resource center that supports high academic achievement for students with disabilities.



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NCSC Wiki

<https://wiki.ncscpartners.org>

Page Discussion

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 26 states (15 core states and 11 Tier II states) the most significant cognitive disabilities. The goal of the NCSC project is to ensure that students with the most significant cognitive di: options. Find out more about NCSC at <http://www.ncscpartners.org> .

This wiki has been created to host the materials that educators will need to accomplish these goals and deliver instruction aligned to tl

- [Curriculum Resources](#) - **What to Teach** (reference materials created to reinforce educators' understanding of curriculum content)
- [Instructional Resources](#) - **How to Teach** (reference materials created to support classroom teaching)
- [Classroom Solutions](#) (solutions or accommodations created by educators and shared here)

- [All Resources](#) - Browse all the types of resources based on category (CCCs, Element Cards, Content Modules, etc)

Assessment

NCSC assessments are in math and ELA, which includes both reading and writing, for grades 3-8 and 11



Format

- Approximately 30 items for each subject (1.5-2 hours over 2 month window)
- These 30 items will cover approximately 10 CCCs
- Most of the assessment items ask the student to select the correct response (e.g. multiple choice).
- Some items will require the student to construct a response (e.g. write a short answer or use an alternate way to respond e.g. picture symbols)
- Assessment design is infused with UDL

Technology

- Some students will use the online testing program directly on the computer.
- For other students, the teacher may print out testing materials and enter student responses into the computer.

Exceptional Circumstances

- NCSC recognizes the need to be cautious about giving assessments to certain students with significant medical needs or those who are clearly expressing distress during the test.
- There will be policies and criteria for dealing with these rare situations.
- There also will be a policy about whether an assessment can be stopped if the student is unable to communicate answers
- Data will be collected whenever these circumstances occur

Parent Documents

<http://www.ncscpartners.org/resources>



Parent Documents Process

- Designed for parents, but also to help educators discuss assessment and instruction with parents of students with significant cognitive disabilities
- Developed with assistance of a State Advisory Group and a Parent Advisory Group