

# Reaching All Learners: College, Career, and Community Ready Tests for Students With Significant Cognitive Disabilities

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# NCSC Background

- In 2010, the U.S. Department of Education awarded the National Center and State Collaborative (NCSC) a grant to develop a new AA-AAS by the 2014-15 school year (states may have different implementation timelines)
- 24 states and five national organizations are working together as NCSC  
<http://www.ncscpartners.org>
- NCSC is developing instructional resources and assessments (for math and ELA) based on Common Core State Standards (CCSS) that can be used in any state <https://wiki.ncscpartners.org>



# Theory of Action

## Long-term goal:

To ensure that students with the most significant cognitive disabilities achieve increasingly higher academic outcomes and leave high school ready for post-secondary options.

**A well-designed summative assessment alone is insufficient.**

To achieve this goal, an AA-AAS system also requires:

- Curricular & instructional frameworks
- Teacher resources and professional development

# NCSC Framework for Assessments, Curriculum and Instruction

- College and career readiness in the NCSC model also includes community readiness
- NCSC approach is to build assessments as a component of a broader system in which curriculum, instruction and assessments are closely linked
- NCSC has developed curriculum/instructional resources for teachers
- The framework is built on a foundation of communicative competence, so students have a reliable way to receive information from others and to show others what they know

**College**

**Career**

**Community**

**Curriculum**

Common Core State Standards  
Learning Progressions  
Core Content Connectors

**Instruction**

Grade-level Lessons  
Accommodations  
Systematic Instruction- carefully  
planned sequence for instruction  
(MASSIs/LASSIs)

**Assessment**

Formative (ongoing during school  
year, monitors learning)  
Summative (end of year or course,  
evaluates learning)

**Communicative Competence**

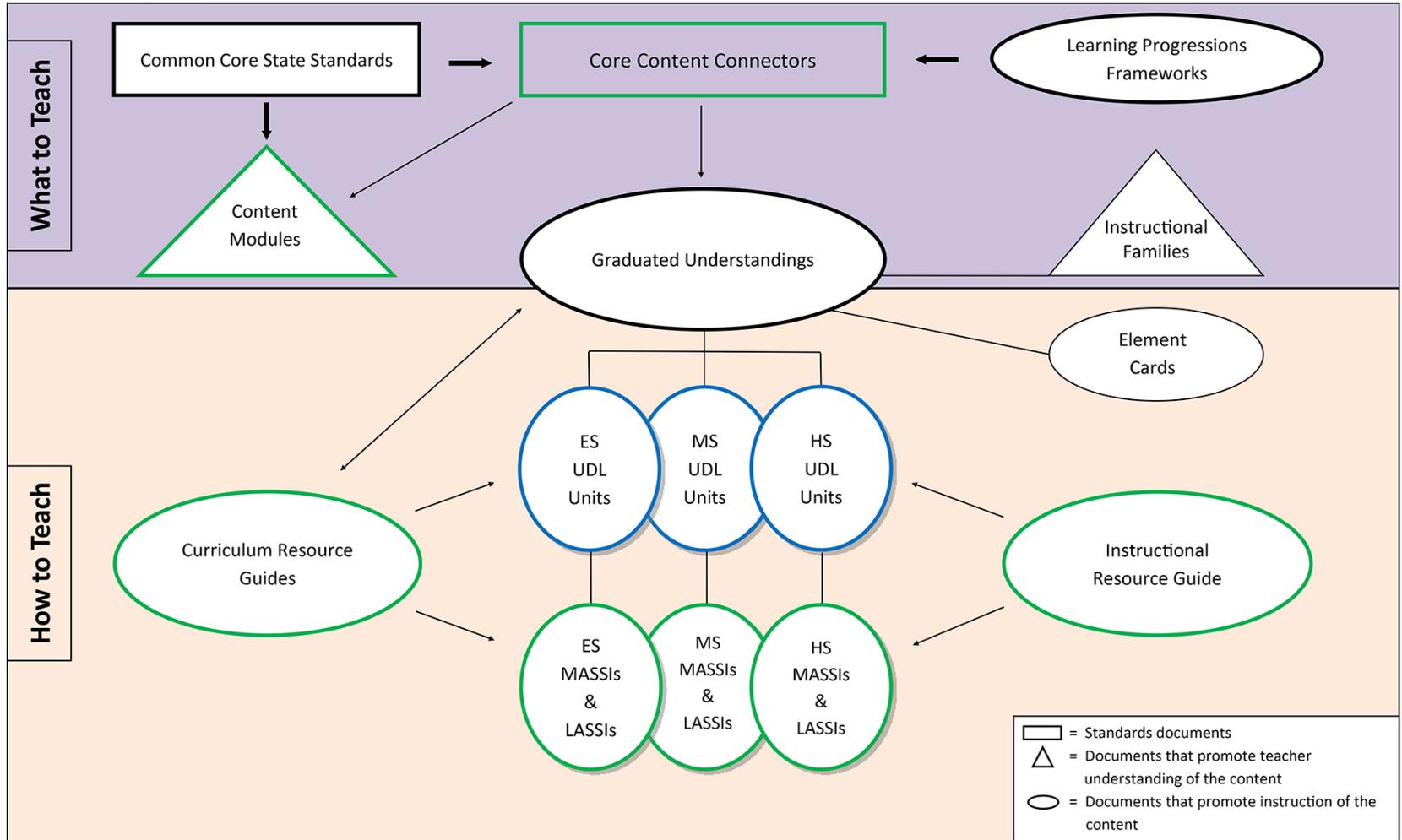
# Accessibility as central to our test validity argument



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- Accessibility to the academic content begins with rigorous curriculum/instruction resources and training for teachers
- A deep understanding of student needs informs design of NCSC resources to ensure inclusive accessibility and appropriately high expectations for learning, to mitigate “my kids can’t do that” excuses
- Reviews of extant literature and best practices inform what students can achieve with reasonable opportunity to learn, but additional small trials and pilots of resources were done where research is thin, as “existence proofs”
- Then, the NCSC assessments were based on same model of learning as reflected in the resources, building a path to success

**SCHEMA for Common Core State Standards Resources**  
 NCSC Curriculum and Instructional Resources



# Overview of the NCSC AA-AAS

- Assessments in Math and ELA, which includes both reading and writing, for grades 3-8 and 11
- Around 30-35 items for each subject, mostly selected response; one writing prompt per grade that accommodates multiple modes of expression
- Direct student interaction with online testing program or the teacher may print out testing materials and enter student responses into the computer
- Approximately 1.5 – 2 hours for each assessment (math and ELA), permitting smaller time slots over a 6-8 week period to meet the student's needs

# The Path to the NCSC AA-AAS Design: Evidence-Centered Design (ECD)

- **Conceptual phase:** Defining how the students and the content come together, in order to design the observations of their learning and to understand the range of student performance, with goal of developing a “family of items” across the range for each content target in the blueprint
- **Design phase:** Development of design patterns and task templates that included extensive design information on content being measured for each item family; scripted administration protocols for each item within a family
- **Existence proof phase:** Tryouts and revisions of every task template with real teachers and students, prior to developing item bank
- **Iterative data-based checks throughout:** Student interaction studies (SIS); survey research; action research model tryouts with partner teachers; large-scale piloting; observations

# Stakeholder/Expert Procedures: Developing the item bank based on ECD design patterns and task templates

- Item Writing Guidelines Documents: i. Visual supports; ii. Graphic style guide; iii. Editorial style guide; iv. Alternative text
- Item development and stakeholder review: a. Item and passage development process; b. Item review process - i. Content, ii. Bias/sensitivity; c. APIP/UDL review
- Item data review: Pilot 1 (Spring 2014) generated item statistics, validating design model and fostering final item revisions
- Final comprehensive review: Pilot 2 (Fall 2014)

# Policies and training on additional needs

- Accommodations Committee, policies, training
- Online system accessibility designed with Assistive Technology in mind
- Accessibility Committee:
  - a. Analysis of item bank for sensorimotor barriers
  - b. Expert panel with stakeholder input, redesign of items and item protocols
  - c. Design of Pilot 1 and Pilot 2 studies
  - d. Tryouts with teacher/school partners
  - e. Final *Additional Procedures Guidance*, special form, Braille items

# Item Statistics from Pilot 1: Support for evidence-centered design of item bank

- About 75% of the assessment items are closely linked to the grade-level content based on student observations under known opportunity to learn; about 25% are a farther link to the grade-level content to allow students who are just beginning to work with the academic content show what they know and can do.
- Pilot 1 item statistics suggest that the range of item difficulty was as expected from easy to hard items, with higher success rates than anticipated across the full range of items, controlling for learner characteristics. Stage-adaptive testing options are being finalized in Pilot 2.
- There are policies and criteria for dealing with rare situations where it may not be appropriate to administer or continue an assessment. When these policies are used there are requirements for data collection in order to flag the need for interventions to address unmet needs (e.g., related services or instructional supports).
- Pilot data on early stopping of testing thus far varies across states, but on average is consistent with baseline learner characteristics data for students who do not as yet have a consistent mode of communication (i.e., have no way to respond).

## Cognitive Labs (SIS Studies) teacher on item difficulty: “

“They were very easy for him to follow along. In fact I thought a couple of them he probably could have read [himself]... I felt like it was pretty much on target. You’ve got some that are kind of easy, so that to me was helping him build his confidence. I’m sorry, I get so emotional, I’m just thinking – this is what I want for my kids! Then you have something that’s a little harder, a little more challenging, and he was willing to keep rolling with it. Whereas if you hit them right off with something hard, our kids will get discouraged and they may not put forth the effort, and we want them to put forth the effort to finish the test, because we want to see where they are so we can meet those needs. So I thought it was a great variety... You all saw, when he walked away he was feeling good.”

## SIS teacher on the cognitive processes targeted by the items:

“What [the test] asked was really reinforcing what he’s learning and the way that he’s learning throughout the year in all of the classes with reading. I felt like it was right on target with how he processes information and how he’s being taught.”

“I think the responses were good, because they weren’t confusing. They stuck to the text... I think the pictures helped. You know it’s hard for our kids who don’t read. They need the pictures.”

# Functional, social, and academic goals merged

- NCSC professional development and materials have encouraged bridging the gap between a traditionally exclusively functional curriculum to providing my students with more opportunities to access the general education curriculum. Teacher comments taken from 2014 External Evaluation of NCSC Classroom Resources
- I just need to share some successes with *The Pearl* and *Marcelo in the Real World* LASSIs [Language Arts Activities for Scripted Systematic Instruction]. A non-verbal freshman student came to us with functional goals: matching, identifying common objects. She is not only doing those things, but is answering all of the questions on both LASSIs using the visuals with 80-100% accuracy with no prompting. I have never been so happy to rewrite an IEP in my life. Submitted by teacher in NCSC state
- I like how the standards and activities that are being developed tie in real world activities and examples. Teacher comments taken from 2014 External Evaluation of NCSC Classroom Resources

# Higher expectations, higher achievement

- Through the initial training I received I have changed my whole classroom philosophy. I have always set high expectations for my students and this training just raised the bar.
- Gives the students a sense of achievement when they do well and are able to answer the questions.
- I expanded my professional knowledge, including the impact of challenges that could be faced by some of my students when they get older and make slower progress in the general curriculum.
- Students are now being challenged with higher curriculum.
- Students performed better during the alternate assessment exams. They were more focused during the lessons and were able to monitor their own progress to some extent.

Teacher comments taken from 2014 External Evaluation of NCSC Classroom Resources



# Recommendations from: *A brief history of alternate assessments based on alternate achievement standards.* Quenemoen, R. (2008)

**Transparency.** We need to know what varying practices and targets yield for student outcomes by ensuring that assessment development, implementation, and results are transparent and open to scrutiny.

**Integrity.** Flexibility can mask issues of teaching and learning unless it is carefully structured and controlled. Similarly, standardization as a solution risks reducing the integrity of the assessment results when the methods do not match the population being assessed and how that population demonstrates competence in the academic domains.

**Validity studies.** We have an obligation to monitor carefully the effects of alternate assessments over time, as well as to ensure the claims we are making for the use of the results are defensible.

**Planned improvement over time.** In building a validity argument, we study whether the interpretations and uses of the test are defensible, and whether consequences that are hoped for and those that are to be avoided are in fact falling into their respective places.