

NCSC Summative Assessment Overview

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National Center and State Collaborative

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NCSC Theory of Action

Long-term goal:

To ensure that students with 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 and instructional frameworks
- Teacher resources and professional development



NCSC Overall Timeline January 2011-October 2015

Year 1 (2011): Content Model Phase: Define model of domain learning in math/ELA for these students, identify prioritized content for assessment

Year 2 (2012): Principled Design Phase: Design Patterns, Task Templates, C/I/PD design and pilot; Technology architecture design

Year 3 (2013): Item and Test Development Phase: Task Template Tryouts, Item Specs/item development/item reviews, Student Interaction Studies (SIS), Draft grade level PLDs, finalize pilot/field design, Tech build

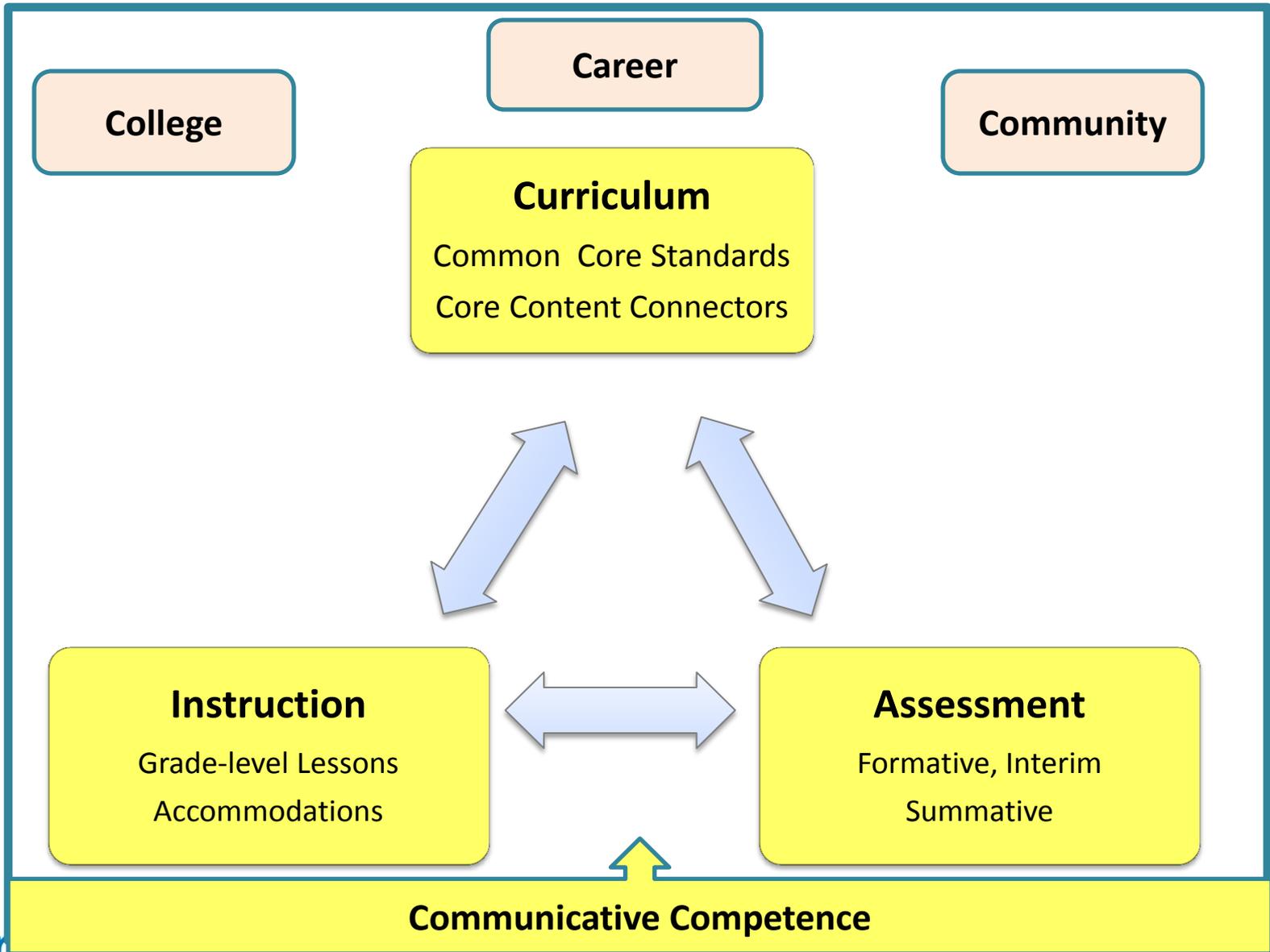
Year 4 (2014): Pilot, Field, Research Phase:

- **Pilot Phase I: National Sample, generate item statistics Winter/Spring 2014**, Finalize blueprints, revise items, assemble forms
- **Pilot Phase II: Field Test Forms Fall 2014**, finalize administration training and supports

Year 5 (2015): Operational administration of NCSC assessments

- Summer 2015: Set Standards
- Fall 2015: Technical reporting complete





Curricular and Instructional Resources

- Provide guidance on how to “unpack” the instructional and assessed content;
- Promote strategies and resources for teaching challenging academic content through professional development opportunities; and
- Align challenging and attainable content that is observable and measurable for use in instruction and a thorough system of assessments.



Quality Indicators for Instructional Resources

- Promote Common Core State Standards;
- Set high expectations for all students;
- Apply principles of Universal Design for Learning (UDL); and
- Apply evidence-based teaching practices for students with the most significant cognitive disabilities.

Quality Indicators for Instructional Resources

- Use general curriculum resources and general education content experts' review;
- Offer options for ALL students in the 1%;
- Provide a teacher-friendly resource that promotes effective instruction.

General Description of Assessment System

- Summative math and ELA tests for 3-8, 11 administered in a two-month window in spring
 - Up to 30 items, approximately 1.5-2 hours per test
- Technology delivery with teacher test facilitator/administrator
- universal design features and accommodations guidelines derived from Design Pattern/Task Templates Tryouts and Student Interaction Studies

Assessment Administration

- Presented via computer with flexibility for presentation on devices/ platforms (e.g. tablets) available for the operational test.
- It is expected that most students will interact with an examiner during the administration. Other students may respond to the test items directly via interaction with computer presentation.
- Prior access to summative content will be provided to support examiners preparation for accommodations/ adaptations.
- For most students, it is expected that testing time will be no more than approximately 1.5 to 2 hours per content area, divided between at least two sessions with flexibility to stop and resume.
 - Some students will qualify to take a shorter assessment based on evidence collected before and during the assessment.

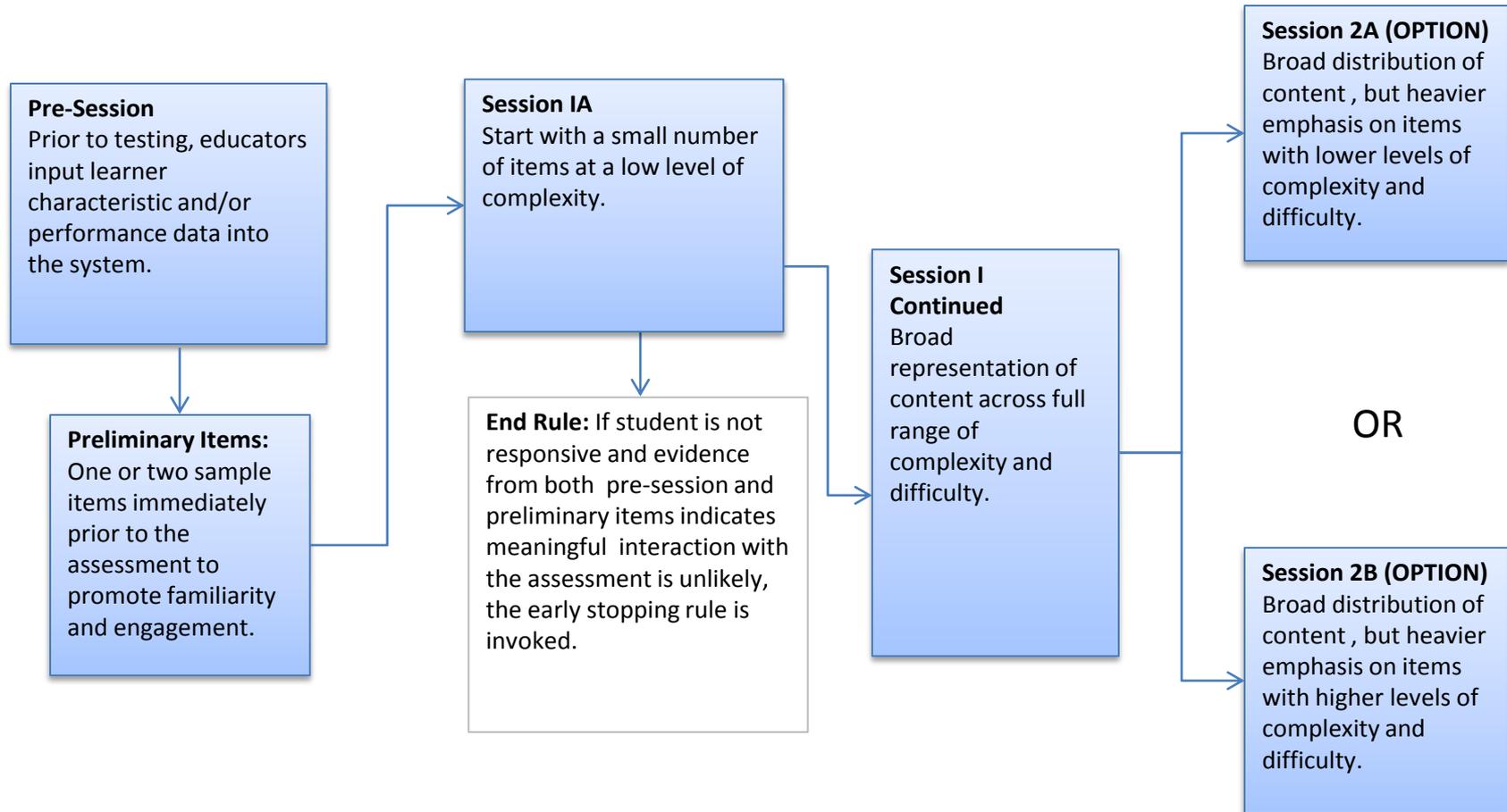
Item Types

- Most of the items will be machine-scored, multiple choice.
- A small number of the items will require human scoring using a scoring rubric. In most cases, these items are open-response activities with correct answers; each student would complete one writing prompt for which application of a rubric is necessary.
 - All of the human scored items will be evaluated by the examiner during the assessment and scores entered.
 - A 20% audit of human scored items is expected

Assessment Outcomes

- **Total score and performance level** for each of mathematics and ELA (reading and writing).
 - Comparable within year and across years.
- Writing is still being decided (raw score and/or narrative description of student performance)

Assessment Design Illustration



Blueprint Illustration- Grade 3 Math

Sample Target Distribution of CCCs by Type and Level - 3rd Grade Math					
Emphasis	Domain	CCC(s)	Target by Item Type (Levels)		
			SR	Multi-SR	CR
10%	Geometry	3.GM.1i1	2 (1-3)		1 (4)
20%	Measurement and Data	3.ME.1d2	3 (1-4)		
		3.DPS.1g1	1 (1)		2 (2-4)
20%	Number and Operations Fractions	3.SE.1g1	3 (1-4)		
		3.NO.1I3	3 (1-4)		
20%	Numbers and Operations Base Ten	3.NO.1j3	3 (1-4)		
		3.NO.2c1	1-2 (1-2)	1-2 (3-4)	
30%	Operations and Algebraic Thinking	3.PRF.2d1	3 (1-4)		
		3.NO.2d3	3 (1-4)		
		3.NO.2e1		3 (1-4)	

Item Development

	ELA			
Grade	Number of Tasks	Number of Levels/Tiers	Number of Items per Level/Tier for each Task	Total ELA Items
3	10	4	4	160
4	10	4	4	160
5	10	4	4	160
6	10	4	4	160
7	10	4	4	160
8	10	4	4	160
HS	10	4	4	160
	Math			
Grade	Number of Tasks	Number of Levels/Tiers	Number of Items per Level/Tier for each Task	Total Math Items
3	10	4	4	160
4	10	4	4	160
5	10	4	4	160
6	10	4	4	160
7	10	4	4	160
8	10	4	4	160
HS	10	4	4	160
Grand Total				2240



Student Interaction Studies

- The project is conducting a series of focused studies to inform ongoing development.
- Research questions will include:
 - To what extent do item levels represent a progression of difficulty/ complexity?
 - To what extent does performance vary by skill/ context?
 - What item/presentation features promote access?

Pilot Test – Spring/ Fall 2014

- **Phase I:** Items will be administered broadly in a ‘matrix’ design for the primary purpose of evaluating item performance and developing bank calibrations.
- **Phase II:** Drawing on the item calibrations from Phase I, intact form/sessions will be constructed and administered. By so doing, these forms will be built to meet psychometric targets and a decision rule governing progression from session one to two can be applied.

Census Testing – Spring 2015

- Full operational assessment in the spring of 2015
- Standard setting will be conducted based on results in summer 2015
- Reports and technical documentation will be produced

Summative Assessment Products Following Grant

At the end of the project's grant funding by fall 2015, states will have:

- A minimum of two forms per grade and content area suitable for future operational use.
 - Information necessary to direct presentation of content in such a manner as to honor the test specifications, blueprints, and psychometric targets for the assessment.
 - Algorithms, rules, and/or tables necessary to produce overall scale scores and performance levels.
 - Rubrics for all human scored items as well as protocols for training scorers and implementing the scoring process.
- Design specifications for all static reports produced to include individual student reports.
- Ancillary material to support administration of summative assessment to include test administration manuals, resources to support training of test examiners, and score interpretation guide.
- Detailed technical documentation of process, procedures, and results from all test development activities.
- All test items developed for the NCSC assessments (i.e. the item bank) will be made available in a format that meets industry standards for interoperability.
- Specifications for certification and implementation of the technology system and training resources.

