Appendix 1: NCSC Overview, Policy PLD Drafts, and ELA Definitions

National Center and State Collaborative

The contents of this product were developed under a grant from the Department of Education (PR/Award #: H373X100002, Project Officer, Susan.Weigert@Ed.gov). However, the contents do not necessarily represent the policy of the Department of Education and no assumption of endorsement by the Federal government should be made.

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Building an <u>assessment system</u> based on research-based understanding of:

- technical quality of AA-AAS design
- formative and interim uses of assessment data
- summative assessments
- academic curriculum and instruction for students with significant cognitive disabilities
- student learning characteristics and communication
- effective professional development

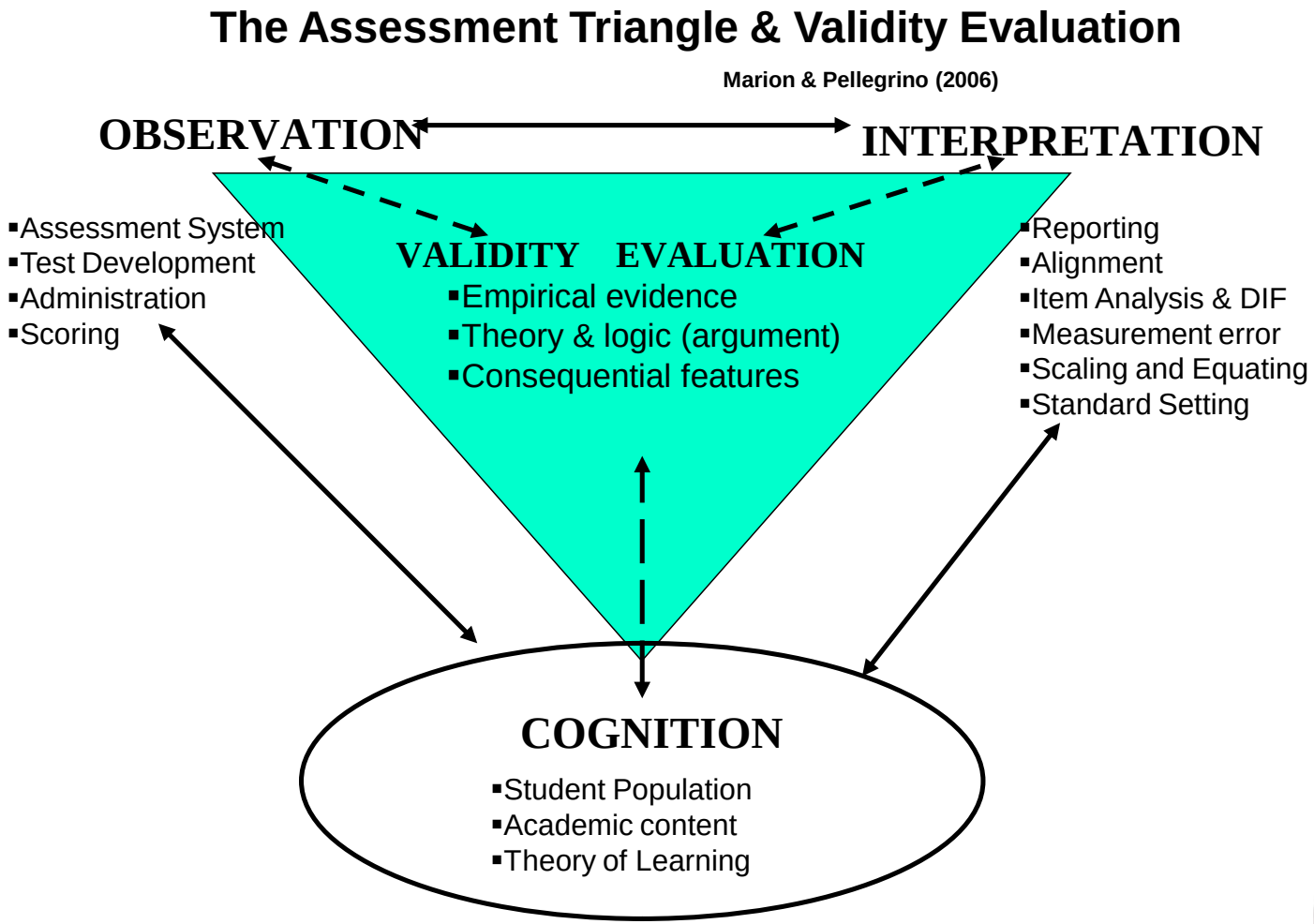
A Comprehensive Model

All partners share a commitment to the research-to-practice focus of the project and the development of a comprehensive model of curriculum, instruction, assessment, and supportive professional development.

Assessment Design: Key Ideas from Cooperative Agreement

- Assessment Triangle (Pellegrino, Chudowsky, & Glaser, 2001)
- College- and career-readiness for SSCD
- Evidence-centered design
- Balancing standardization and flexibility (Gong & Marion, 2006)

The NCSC AA-AAS Conceptual Framework



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Curriculum & Instruction: Key Ideas from Cooperative Agreement

- Learning progressions
- Big ideas/enduring understandings and prioritization of content
- Entry points
- Alignment
- Curricular modules

Professional Development: Key Ideas from Cooperative Agreement

- Communities of Practice
- Scaling up use of CCSS-aligned academic curriculum
- Communication by Kindergarten/ Communication Triage
- Technology and training
- Teacher/principal effectiveness

Evaluation: Key Ideas from Cooperative Agreement

- Argument-based approach (Kane, 2006)
- Theory of Action
- Validity evaluation and process evaluation
- External evaluation

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.

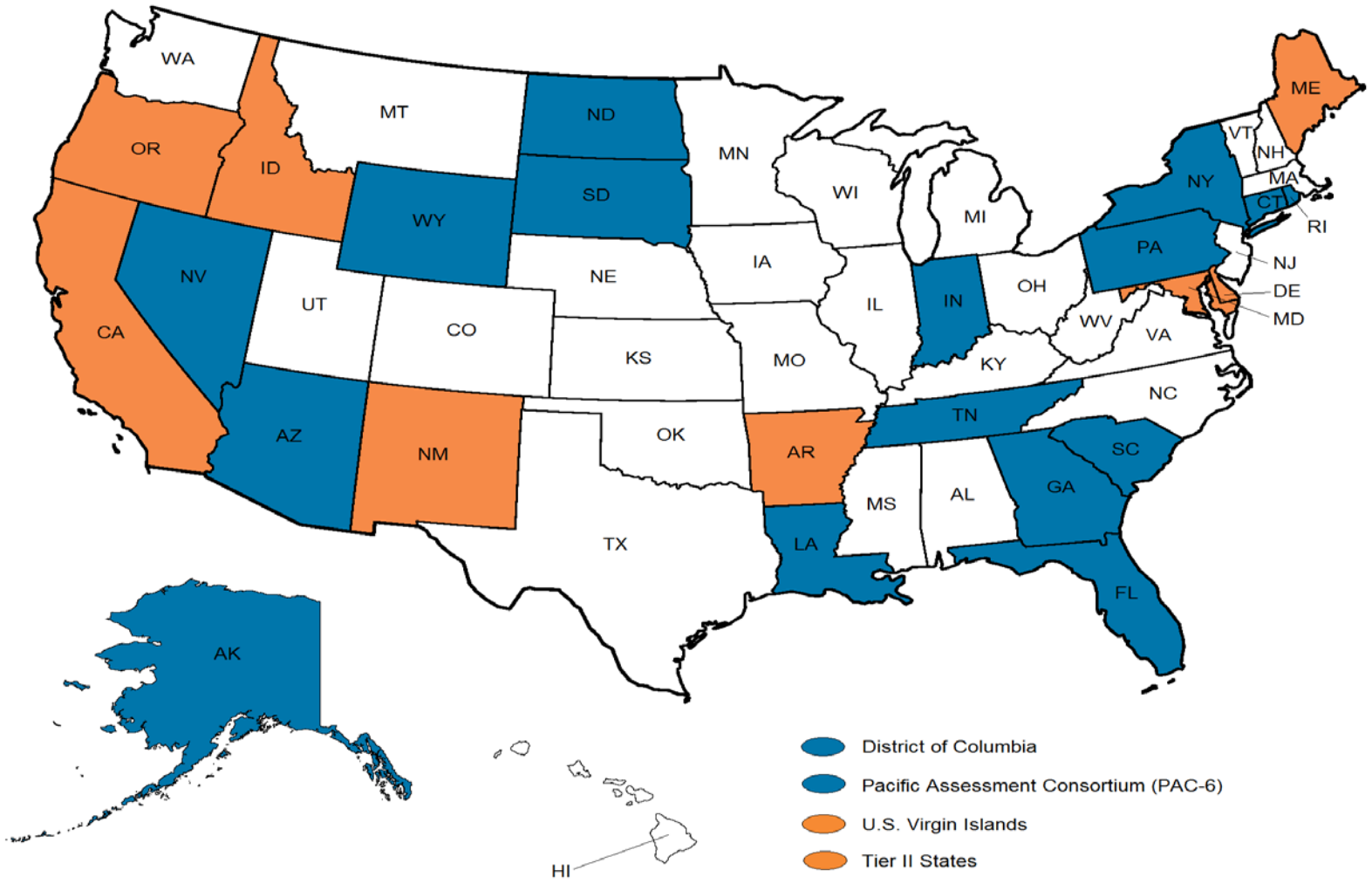
To achieve this goal, an AA-AAS system also requires:

- Curricular & instructional frameworks
- Teacher resources and professional development

Technology System Components from Cooperative Agreement

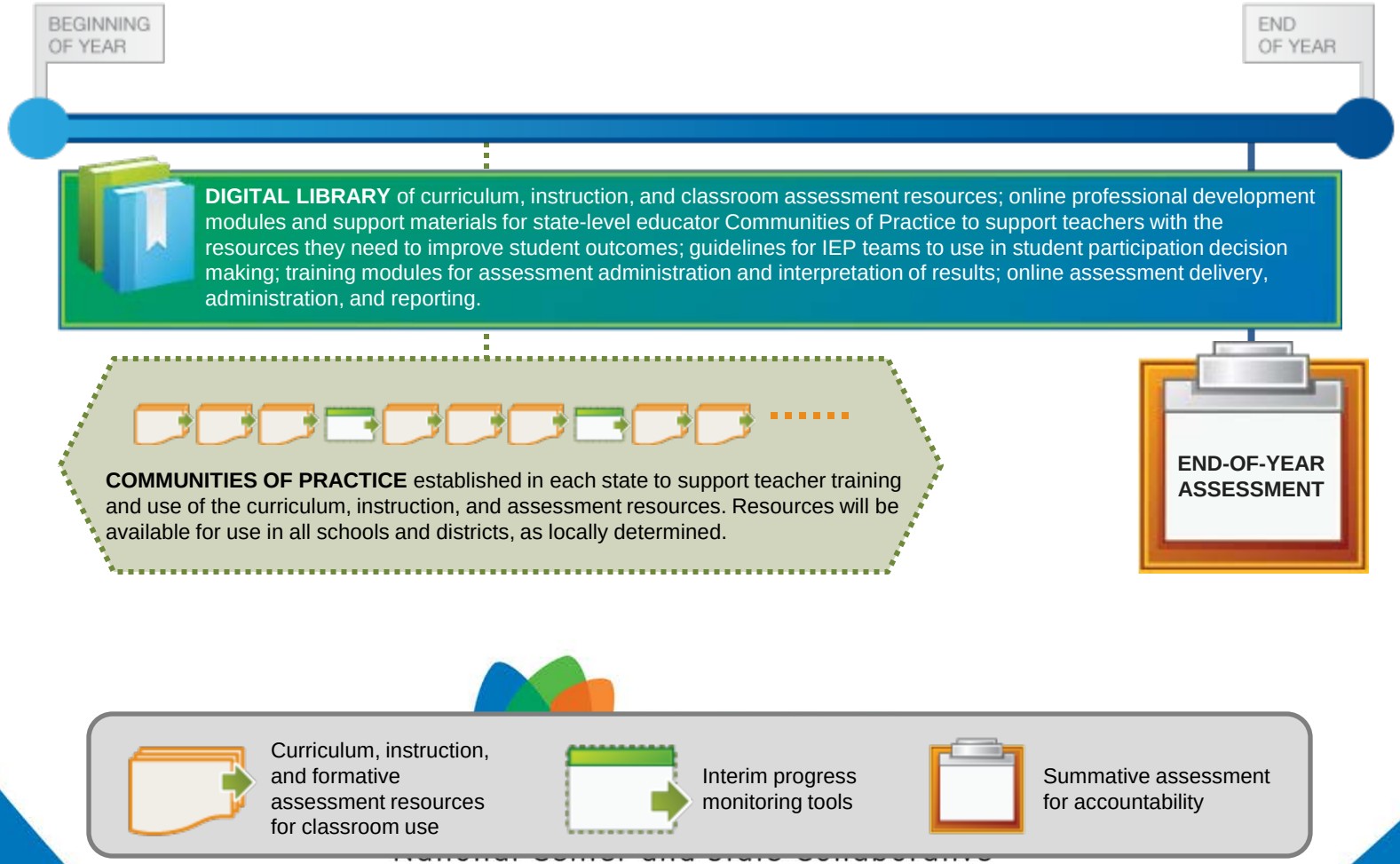
- Proposed development of a comprehensive system to support instruction and assessment to include:
  - Facilitating summative assessment that is enhanced by appropriate assistive technology
  - Providing support for formative assessment tools and strategies, and supporting interim uses of assessment data
  - Supporting professional development and providing instructional resources to include curriculum modules
  - Enabling flexible, dynamic reporting of student performance

NCSC Membership, 10-1-12



The NCSC Alternate Assessment System*

English Language Arts and Mathematics, Grades 3–8 and High School



* Alternate assessment systems are those developed for students with the most significant cognitive disabilities and are based on alternate achievement standards.

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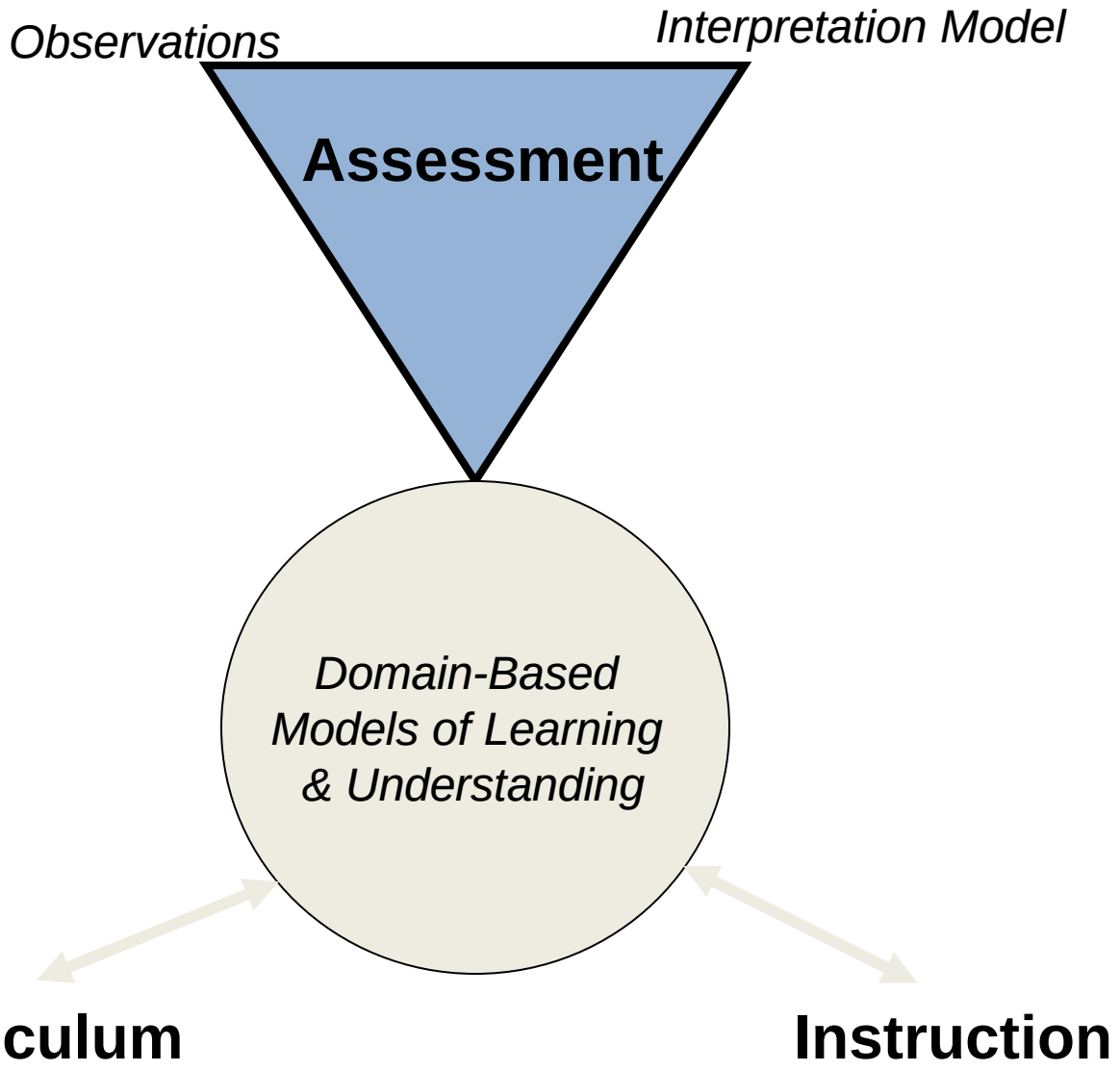
The NCSC foundation of how the students and the content come together: Assessment Triangle Vertex 1

NCSC MODEL OF STUDENT COGNITION

(J. Pellegrino's slide – *KWSK* assessment triangle with C-I-A triangle)



Emerging NCSC Domain-Based Models of Learning and Understanding

- What we are learning about how students with significant cognitive disabilities learn and show what they know in the academic curriculum specific to their enrolled grade; and

- How we can support state by state implementation of a full system to support their learning and document implementation status in schools, LEAs, states, in order to learn more about their learning with OTL conditions.

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Kleinert, Browder, & Towles-Reeves, 2009

- Previous attempts to apply cognitive theories to education of students with significant cognitive disabilities (SWSCD) yielded inappropriate chronological age models and promoted a deficit model rather than a capacity building model.

- The cognitive models focus not on how much knowledge a student has comparable to others (i.e., differential perspective), but in the quality and organization of that knowledge in ways that can be meaningfully applied.

- Although SWSCD often lack systematic approaches to identifying and solving problems, problem-solving strategies can be directly taught. Growth is important; one-time snapshots may not capture gains over time, and then has to be designed carefully to capture not just “amount” but true growth in understanding.

Kleinert, Browder, & Towles-Reeves, 2009

Need to develop an understanding unique to these students on how they actively construct knowledge and apply mental models and processes to the problems they encounter.

The paper describes students who have documented differences from typical students including:

- limitations in short term memory (which appear to affect long term memory as well),
- require more explicit practice and feedback than typical students;
- transfer/generalizability of concepts need to be explicitly taught and assessed,
- more subtle and gradual process of learning than for typical students.

Behaviorist perspective

- Relies on task-analytic, repeated trial assessment, permanent product, time-based observation to define and measure observable responses.
- These methods underlie much of the “technology of teaching” for these students, and most state alternate assessments require the demonstration of clearly measurable and observable targeted skills, broken down into subskills for both teaching and measurement.
- Traditionally, this does not focus on how student construct, organize, and/or use the knowledge they attain.

Situative Perspective

For SWSCD, the situative perspective introduces two essential concepts for both learning and assessment:

a. SWSCD benefit from instruction with typical peers in inclusive settings. Substantial research supports not only social benefits but also attainment of educational goals.

b. If SWSCD are to acquire skills to prepare them for competence in real world, they need to perform those skills in settings where they will be needed, given difficulty in generalizing skills, ability to transfer is characteristic of this group of students.

Behaviorist perspective in C/I/PD

- Our C/I materials reflect this approach in our SASSIs, with evolving models of how to build graduated understanding that builds from big ideas, not simply building stimulus/response linkages.
- Opportunities for additional research on graduated understanding on evolving models, with additional funding.

Situative perspective in C/I/PD

- Our C/I materials include this approach in our grade-level UDL units and in examples of real world applications of the targeted skills and knowledge.
- State partners have put a high value on inclusive education settings, and see potential for unintended and negative consequences related to increased segregation in the name of improving alternate assessment scores.

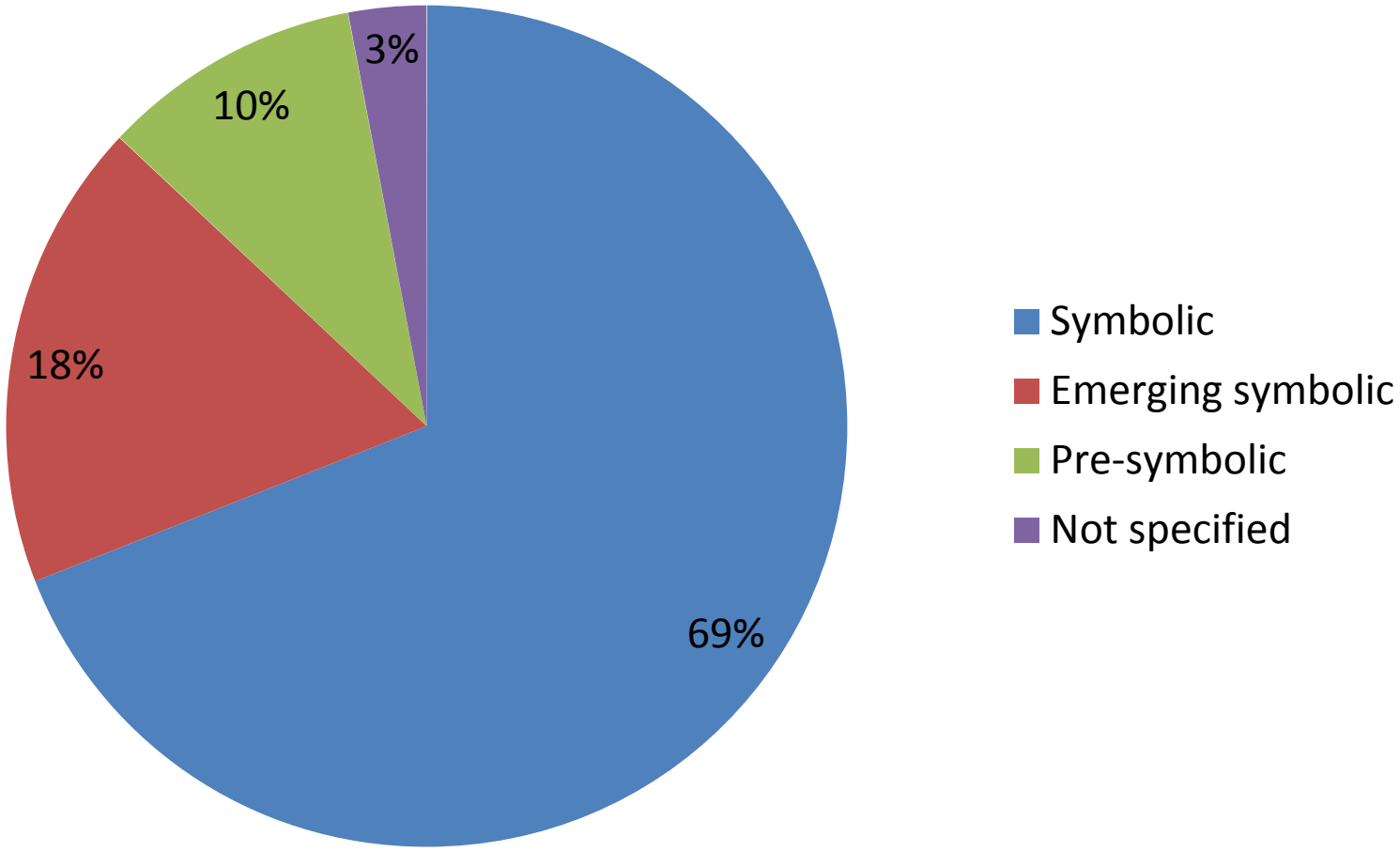
Who are the students?

- How do these students interact with the academic content to be assessed?

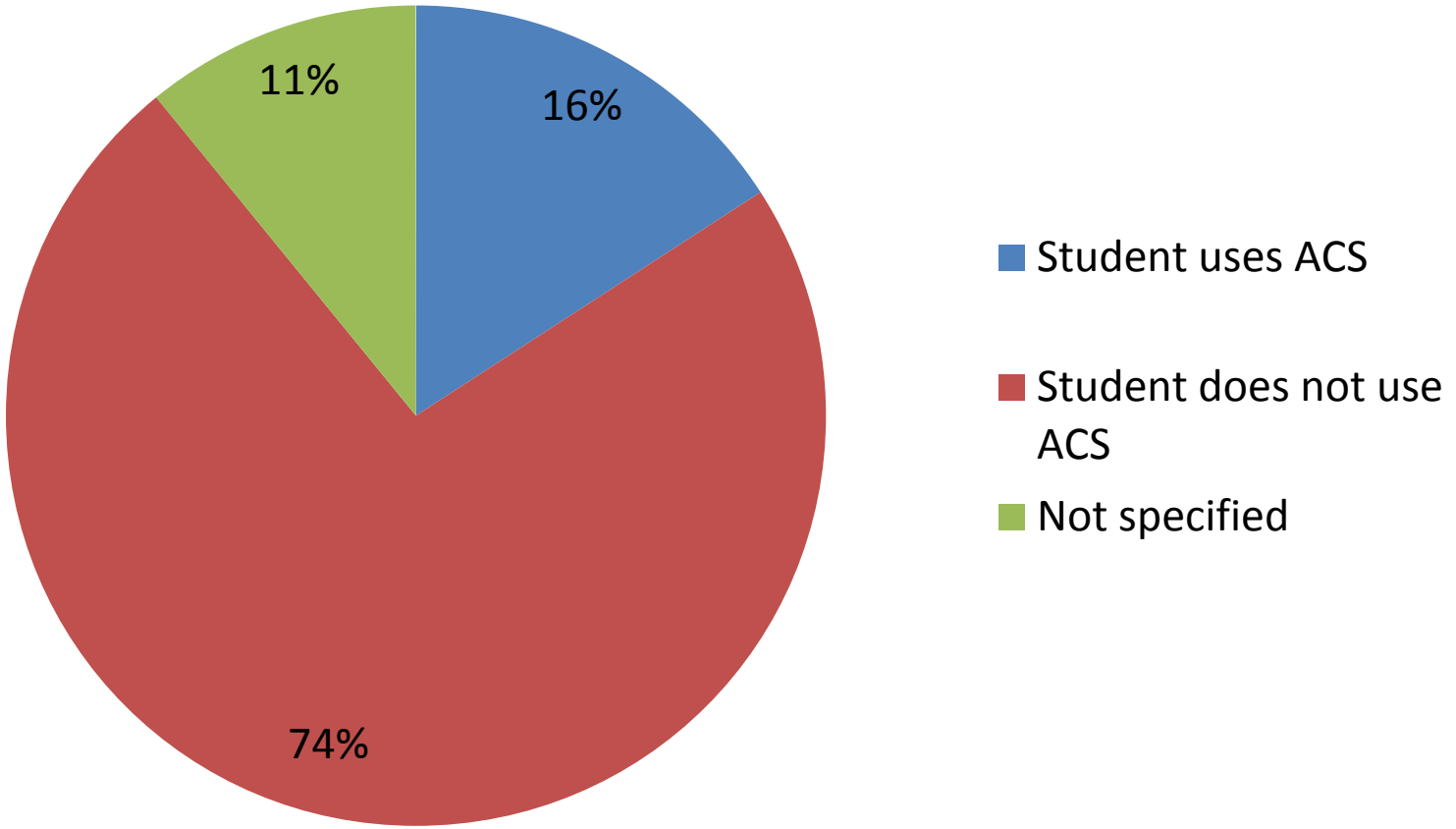
Summative Assessment Design Implications

- Participation Policy for AA-AAS
- Using LCI Data to Inform an Evidence-Centered Design Process
- Developing and Using Learner Characteristics Profiles
- Validity Evaluation Research and LCI Data

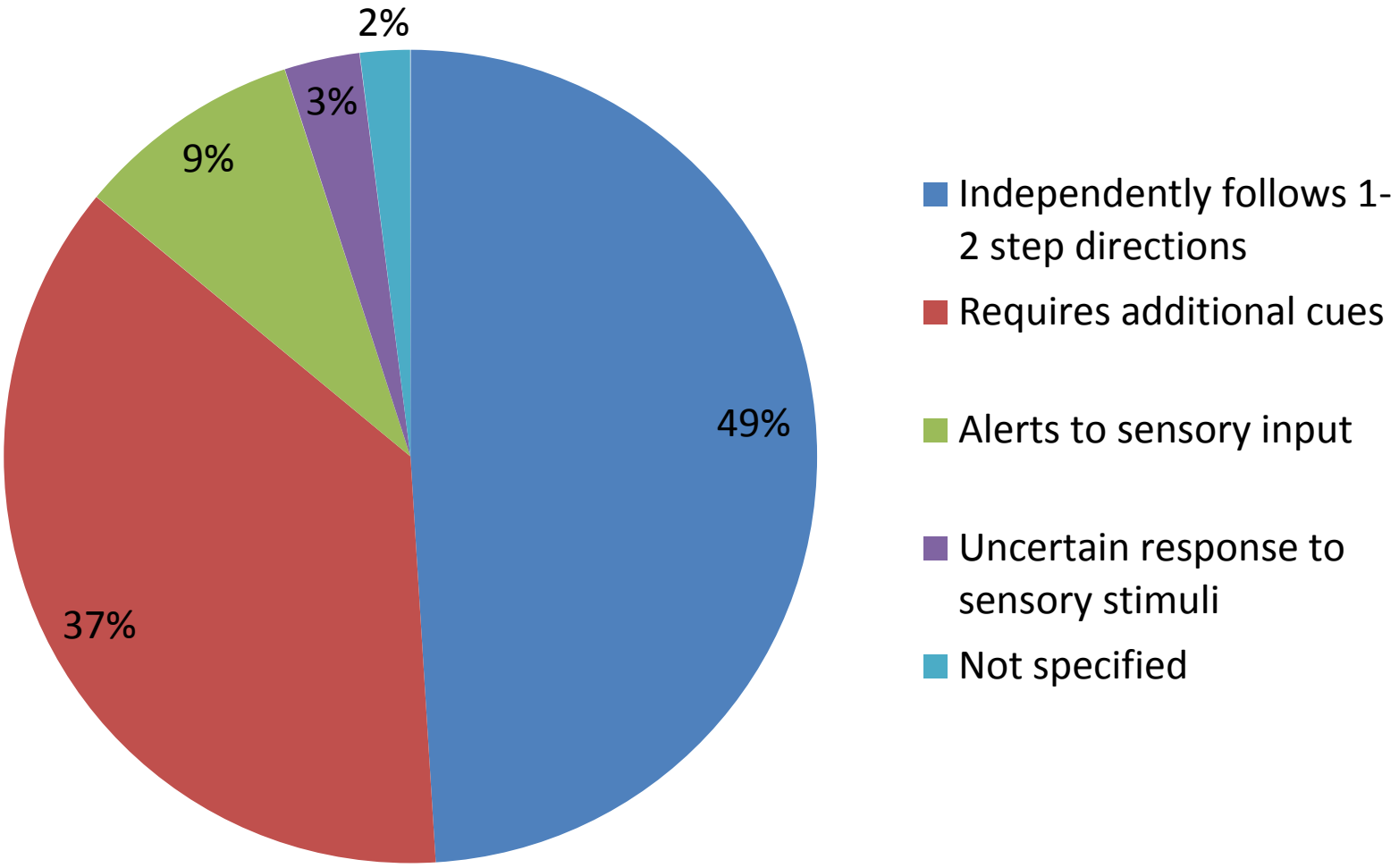
Expressive Communication



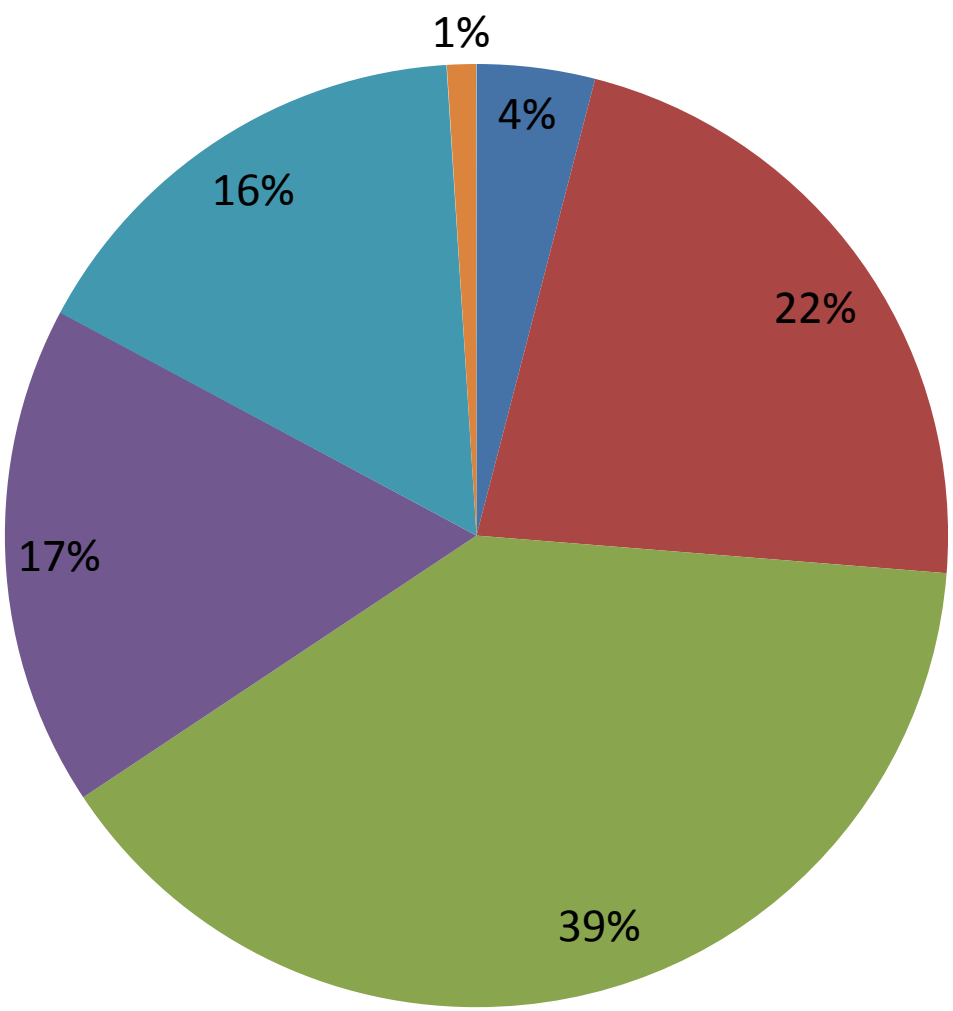
Use of Augmentative Communication System (ACS)



Receptive Language

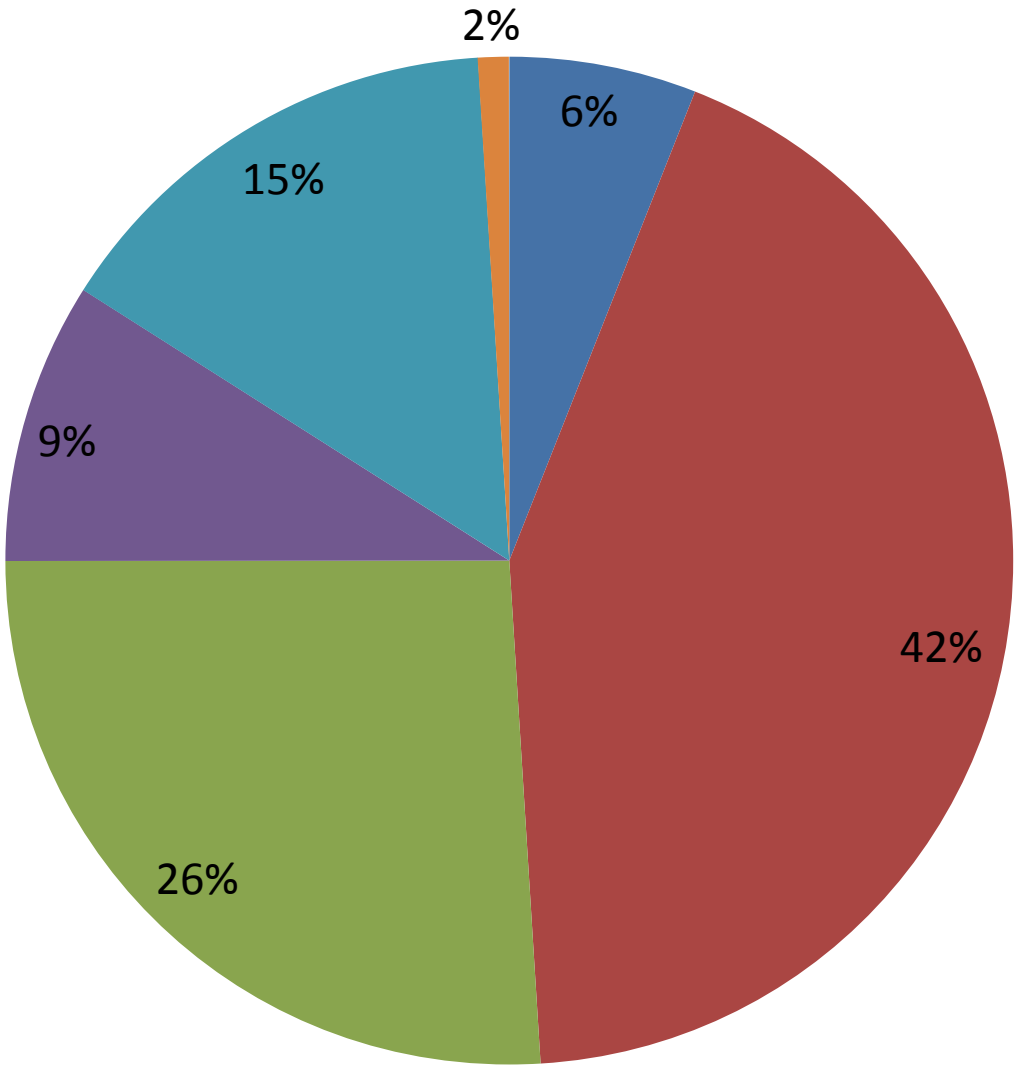


Reading



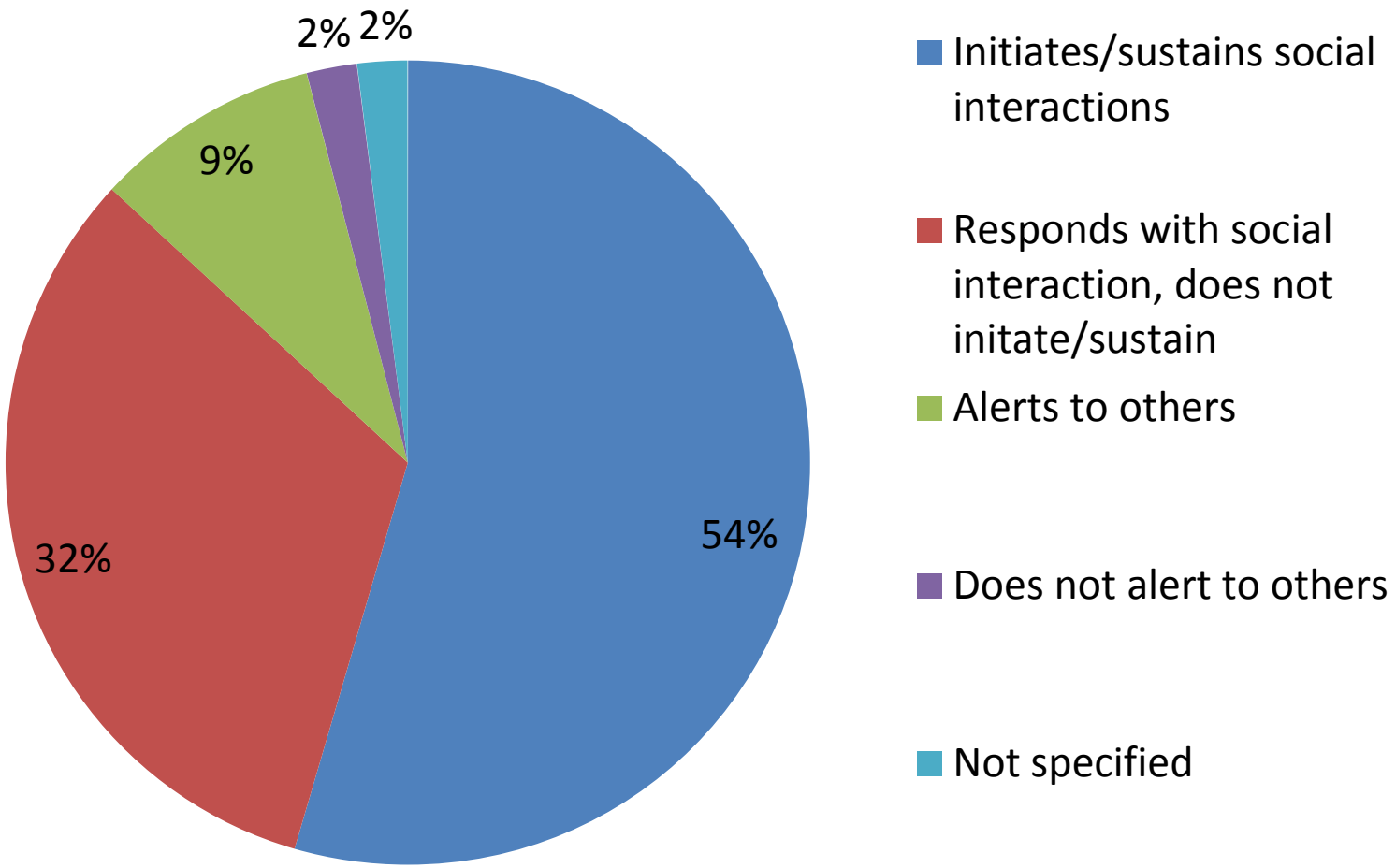
- Reads fluently with critical understanding in print or Braille
- Reads fluently with basic literal understanding in print or Braille
- Reads basic sight words in print or Braille
- Aware of text/Braille
- No observable awareness of print/Braille
- Not specified

Mathematics



- Applies procedures to solve real life or routine word problems from a variety of contexts
- Does computational procedures with or without a calculator
- Counts with 1:1 correspondence to at least 10, and/or makes numbered sets of items
- Counts by rote to 5
- No observable awareness or use of numbers
- Not specified

Engagement


2%
2%
9%
32%
54%
Initiates/sustains social interactions
Responds with social interaction, does not initate/sustain
Alerts to others
Does not alert to others
Not specified

What is the content?

- How do we identify the content targets to be assessed? How do we build capacity for educator understanding the use of the CCSS?

Common Core State Standards

- Define grade level content and achievement;
- Define rigorous content and skills (application knowledge);
- Align with expectations for college and career success; and
- Do **not** tell teachers how to teach, but they do help teachers figure out the knowledge and skills their students should have so that teachers can build the best lessons and environments for their classrooms.

http://www.corestandards.org/

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Learning Progressions

- Define research-based pathways for learning;
- Developed and refined using available research and evidence;
- Have clear binding threads that articulate the essential core concepts and processes of a discipline (sometimes called the ‘big ideas’ of the discipline); and
- Articulate movement toward increased understanding (meaning deeper, broader, more sophisticated understanding).

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)

- Identify the most salient grade-level, core academic content in ELA and mathematics found in both the CCSS and the LPF;
- Illustrate the necessary knowledge and skills in order to reach the learning targets within the LPF and the CCSS;
- Focus on the core content, knowledge and skills needed at each grade to promote success at the next; and
- Identify priorities in each subject area to guide the instruction for students in this population and for the alternate assessment.

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 thorough a system of assessments.

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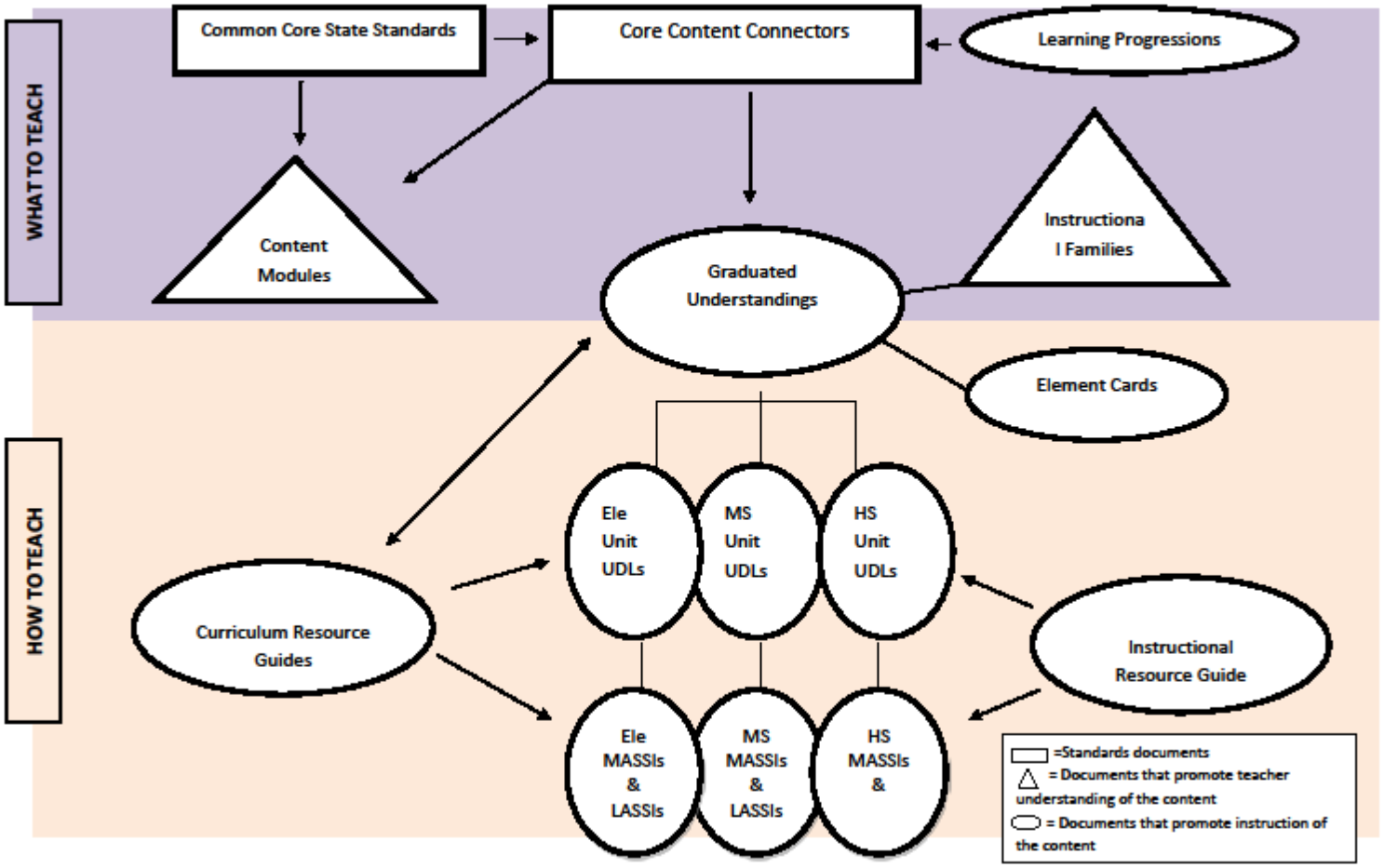
SCHEMA for Common Core State Standards Resources
NCSC Instructional Resources



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%;
- Reflect same emphasis/ priorities being used for assessment; and
- Provide a teacher-friendly resource that promotes effective instruction.

The NCSC AA-AAS Development Process: Assessment Triangle Vertex 2

NCSC OBSERVATIONS OF STUDENT KSAs: EVIDENCE CENTERED DESIGN

SRI as Design Partner for ECD process to generate Item specifications

- The NCSC partners identify the target content for each assessment
- The ECD approach is agreed to in our cooperative agreement with OSEP and was central to our proposal design
- SRI is tailoring their process to NCSC requirements through iterative reviews and revisions

Summary

- ECD is well-suited to developing alternate assessment tasks; supports integration of UDL
- ECD allows the systematic documentation of assessment tasks to support efficiency of task development (re-usability)
- ECD supports the design/development of items that systematically vary in levels of complexity
- The co-design approach actualizes the value of the special educators, content specialists and assessment specialists

Next Steps

Once state and staff iterative review is complete with consensus on slope/levels, SRI teams go through quality reviews to smooth and shape. The draft Task Templates are exported into formats that allow teachers to try out the templates with students.

Following that task template tryout, staff and states review data to make final task template design adjustments, prior to an item development vendor replicating for the assessment.

ID	Major Milestones For Item Writing Project	Completion Date
1	Notification of Award	
2	Kickoff meeting	
3	Submission of math item specifications	
4	Submission of math items	
5	Content Review of math items	
6	Bias/Sensitivity Review of math items	
7	Universal Design Review of math items	
8	Finalize math items to be uploaded to item bank	
9	Submission of ELA item specifications	
10	Submission of ELA items	
11	Content Review of ELA items	
12	Bias/Sensitivity Review of ELA items	
13	Universal Design Review of ELA items	
14	**Finalize ELA items to be uploaded to item bank**	

What will the summative assessment look like?

Assesses NCSC selected **high priority KSAs** in English language arts and mathematics for students in grades 3–8 and 11 at four levels of complexity

- Measures **current student achievement and supports understanding of growth across time**

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NCSC Math Performance Level Descriptors v.3

DRAFT Policy Descriptors (General Content Claims)

May, 2012 Baltimore

4. Students at this level demonstrate an understanding of core subject matter in the content area. They are actively working with grade-level content that has been adapted to focus on the essential knowledge and skills for this grade level. Students can perform most mathematical processes and procedures with accuracy. They can demonstrate or explain the application of most mathematical concepts. Students can interpret or represent quantitative relationships by selecting and using mathematical tools, such as manipulatives, models, rules, or symbols. They can make sense of problems based on real-world scenarios, choose an appropriate strategy, and apply mathematics to find a solution.

3. Students at this level demonstrate a basic understanding of core subject matter in the content area. They are actively working with grade level content that has been adapted to focus on much of the essential knowledge and skills for this grade level, and may need occasional prompts and assistance to complete tasks and activities in the subject. Students can perform many mathematical processes and procedures with accuracy. They can apply many mathematical concepts and provide or identify explanations. Students can interpret or represent quantitative relationships using mathematical tools, such as manipulatives, models, rules, or symbols when given the appropriate tool. They can make sense of problems based on real-world scenarios, choose an appropriate strategy, and apply mathematics to find a solution, often with scaffolding or other allowable supports.

2. Students at this level demonstrate a limited understanding of core subject matter in the content area, when provided with frequent prompts and support. They are working with simplified content that has been adapted to focus on much of the essential knowledge and skills necessary for this grade level. Students can sometimes perform simple mathematical processes and procedures when given step-by-step directions, modeling, and support. They can apply mathematical concepts using concrete examples, but often have difficulty using symbols. Students can sometimes represent simple quantitative relationships using basic mathematical tools, such as manipulatives or models when given the appropriate tool. They can make sense of simple problems based on concrete, real-world scenarios. When given the strategy to use, they can apply mathematics to find a solution.

1. Students at this level demonstrate very little understanding of grade level content that has been adapted to focus on much of the essential knowledge and skills, even with extensive prompts and support. They work with foundational mathematical concepts in grade-appropriate context.

NCSC ELA DRAFT Policy Descriptors (General Content Claims)

September, 2012 Pittsburgh

- Highlighting indicates the "writing" portion of the ELA descriptors, currently remaining under consideration.

4*	3*	2*	1*
Students at this level demonstrate an understanding of English language arts. They are actively working with adapted grade level content that focuses on the essential knowledge and skills and may need occasional supports to complete tasks and activities. • Students comprehend (gain meaning) a **wide variety** of literary and informational texts. • They demonstrate **use of** vocabulary, word parts **and** context clues to determine the meaning of words and phrases. • They **compose** in order to convey literary, informational and persuasive messages **for specific or**	Students at this level demonstrate a basic understanding of English language arts. They are actively working with adapted grade level content that focuses on the essential knowledge and skills and may need occasional supports to complete tasks and activities. • Students comprehend (gain meaning) a **variety** of literary and informational texts. • They demonstrate **use of** vocabulary, word parts, **or** context clues to determine the meaning of words **and/or** phrases. • They **compose** in order to convey literary, informational and persuasive messages **for an** audience **using**	Students at this level demonstrate a limited understanding of English language arts. They are actively working with adapted grade level content that focuses on the essential knowledge and skills and may frequently need supports to complete tasks and activities. • Students comprehend (gain meaning) a **limited variety** of literary and informational texts. • They demonstrate **inconsistent use of** vocabulary, word parts and/or context clues to determine the meaning of words and/or phrases. • They **compose** in order to convey **simple** literary, informational,	Students at this level demonstrate minimal understanding of English language arts that has been adapted to focus on basic knowledge and skills, even with extensive supports. • Students demonstrate **limited** comprehension (gain meaning) of basic literary and informational texts. • They demonstrate limited **use of** vocabulary, word parts **or** context clues to determine the meaning of words and/or phrases. • They **compose** in order to convey **simple** literary, informational, and/or persuasive messages **for a specified** audience rarely **using supporting evidence.** • They demonstrate limited use of **basic** conventions

multiple audiences using extensive source-based **supporting evidence**. • They consistently **apply** conventions of Standard English.	**some supporting evidence**. • They consistently **apply basic** conventions of Standard English.	and/or persuasive messages **for a specified** audience inconsistently **using supporting evidence**. • They inconsistently **apply basic** conventions of Standard English.	of Standard English.

*Titles not finalized.

NCSC ELA definitions adapted from the Links for Academic Learning (Flowers et al., 2007) to be in line with CCSS domains

The definitions are intended to support in the development of assessment items and instructional resources. They are framed using the strands identified by the CCSS. The information in the parentheses mirrors the language in the CCSS and is intended to further define this frame.

Reading (foundational): Knowledge of concepts about print (e.g., reading left to right, read top to bottom, parts of a book, identify the title), the alphabetic principle (i.e., words are composed of letters that make sounds), and basic conventions of the English writing system to pronounce or identify words (decode text) including deciphering symbols (letters, pictures, Braille); identification of sight words/symbols or irregularly spelled words

Reading (literature and informational text): Making meaning from texts (may be adapted with picture supports) and a variety of print (including but not limited to picture symbols) and non-print media. Text and media may be presented in conjunction with read aloud as an accommodation unless item/instruction is designated as decoding text.

Language (writing and reading comprehension): A) Recognizing and using conventions of Standard English (grammar, capitalization, punctuation, and spelling) within writing, speaking or other accepted communicative methods (e.g., American Sign Language, Braille). This may be represented to the student or produced by the student in text, picture supports or tangible symbols. B) Acquiring vocabulary understandings within context through listening, reading, and print media and use within the production of a permanent product and/or speaking or produced communication.

Writing (different text types and production): Generating a permanent product to represent and/or organize ideas or thoughts so messages can be interpreted by someone else when the writer is not present. Symbols (e.g., picture symbols, objects) that represent and assistive technology that produce text may be used.

Research (incorporated within writing in CCSS): Gathering information on a topic or subject to obtain information. Analyzing and/or reporting the information using permanent products and non-written communication is also possible. Information can be represented, gathered and organized using a variety of media, visual and tangible supports (e.g., using picture symbols within graphic organizers).

Speaking and nonverbal communication: Generating (initiated and responsive) or expressing non-written communication (e.g., verbal, American Sign Language) for formal and informal use; written text or representations may be used within the mode of communication (e.g., written text or Braille on an assistive technology device)

Listening: Building understanding through an intentional response within context to what is heard or communicated from a variety of sources (e.g., video, audio, orally presented text, digital text, sign language); More than response to sound