
Understanding the AA-MAS: How does it fit into a state assessment and accountability system?

Presentation for SCASS groups

by Marianne Perie

Center for Assessment

February 4, 2009



Background on AA-MAS

- Federal regulations released in April 2007 allowed states to develop an additional assessment for students with disabilities through which another 2% of students may be counted as Proficient under NCLB
- The AA-MAS is an assessment that covers the same grade-level content as the general assessment with expectations for content mastery modified

States need to determine...

What are their barriers to demonstrating understanding?

Who are the students?

How do they process information and learn?

How will they be assessed?

What does proficiency mean?



National Progress to Date

- Six states submitted their AA-MAS for peer review in March 2008
- No state passed, but USED commissioned a paper to describe the findings and recommendations to states
 - *“Lessons from the Initial Peer Review of Alternate Assessments Based on Modified Achievement Standards”* by Janet Filbin (2008)

Major Findings from Peer Review (Filbin, 2008)

- Peer reviewers identified several major areas of confusion regarding the development of the AA-MAS as follows:
 - Identifying students eligible to take the AA-MAS
 - Providing guidelines for writing standards-based IEPs and then monitoring the implementation of those guidelines
 - Designing an assessment based on grade-level content standards that is of an appropriate difficulty and depth of knowledge for this population
 - Determining the relationship between the AA-MAS, the general assessment, and the alternate assessment based on alternate achievement standards (AA-AAS)
 - Writing appropriate modified achievement level descriptors

Issues for Discussion Today

- Identifying the target population
- Determining how this test fits with the general assessment and the AA-AAS
- Defining “modified” achievement standards
- Enhancing and revising items for the AA-MAS

Defining the Population

- According the US ED, “there is a small group of students whose disability precludes them from achieving grade-level proficiency and whose progress is such that they will not reach grade-level proficiency in the same time frame as other students.”
- But who is this small group?
 - Ground rules provided by Federal guidelines
 - Lessons learned from data mining
 - Greater depth provided by focus groups/surveys

Ground Rules: Eligibility

- US ED guidance stipulates:
 - There must be objective evidence demonstrating the student's disability has precluded the student from achieving grade-level proficiency
 - The student's progress to date in response to appropriate instruction, including special education services designed to meet the individual needs of the student, is such that even if significant growth occurs, the IEP team is reasonably certain the student will not reach grade-level proficiency within the year covered by the IEP
 - The student's IEP must include goals that are based on the academic content standards for the grade in which the student is enrolled

Information from Data Mining

- Data from two states that have analyzed student performance on their general assessments
 - Georgia: Three years of data from the CRCT
 - South Carolina: Two years of data from the PACT
- Identified persistent low performers (PLPs)
 - Students who scored in the lowest performance level two or three years in a row
 - SC examined students in grades 4 and 7 with two years of data scoring in the lowest of four levels
 - GA examined students in grades 5 and 8 with three years of data scoring in the lowest of three levels

Results from Data Mining

- Georgia PLPs (3 yr)
 - Grade 5 Reading: 3%
 - Grade 5 Mathematics: 4%
 - Grade 8 Reading: 4%
 - Grade 8 Mathematics: 9%
 - N's ranged from 4,016 to 12,252
 - Georgia averages
~125,000+ students per grade
- South Carolina PLPs (2 yr)
 - Grade 4 ELA: 11%
 - Grade 4 Mathematics: 14%
 - Grade 7 ELA: 22%
 - Grade 7 Mathematics: 16%
 - N's ranged from 5,470 to 10,979
 - South Carolina averages
~53,000 students per grade

More on PLPs

- In Georgia, the percentage of PLPs who have documented disabilities ranged from 40 to 55%
- In South Carolina, the percentage of PLPs who have documented disabilities ranged from 39 to 49%
- That means that about half of all persistent low performers do not have a disability and are therefore not eligible to take the AA-MAS

South Carolina Additional Adjustment

- Because there was such a high number of PLPs, the decision was made to subdivide that population further
- SC School Report Card accountability reporting divides the Below Basic level into two levels: Below Basic 1 (BB1; lowest) and Below Basic 2 (BB2)
- The cut score for BB2 was set at two standard errors of measurement below the Basic cut score
- SC created a second set of analyses identifying PLPs as students scoring at BB1 in both years.
- (Just as a note, in another consortium, five states defined PLPs as students who scored in the bottom 10% three years in a row.)

New SC PLP Numbers Using BB1

Content Area	SWD		Non-SWD		Total	
	N	%	N	%	N	%
Gr. 4 ELA	1,398	2.9	801	1.6	2,199	4.5
Gr. 4 Math	1,602	3.3	941	1.9	2,543	5.2
Gr. 7 ELA	1,794	3.7	766	1.6	2,560	5.3
Gr. 7 Math	1,482	3.0	778	1.6	2,260	4.6

Results of SC Adjustment

- Now we have a greater percentage of BB1 PLPs with disabilities than without (63 to 70% were SWDs)
- Total numbers are now much closer to Georgia's and much more manageable for further analysis
- Additional analyses were done using two years at BB1 as the definition of PLP

Some Demographics of PLPs

Characteristic	Georgia		South Carolina	
	Baseline	Identified	Baseline	Identified
Male	51%	60-65%	51%	70-74%
Black	40%	60-65%	37%	59-60%
Free/reduced lunch	50%	75-80%	55%	82%
ELL	5%	7-12%	4%	5-8%

Looking More Closely At ELLs

South Carolina Data

Group	SWD Students			Non-SWD Students		
	BB1	Not BB1	All	BB1	Not BB1	All
Grade 4 ELL	4.2	2.7	3.0	19.1	4.5	4.8
Grade 7 ELL	2.7	2.3	2.4	16.6	3.4	3.7

Type of Disability

- Most prevalent types of disability in PLP group appear to be mild intellectual disabilities and specific learning disabilities
- Georgia:
 - Approximately 10% of students in the general population have mild intellectual disabilities, but up to 30% of the PLP population have that listed as their primary disability
 - Around 33% of PLP population with a disability has a specific learning disability listed as their primary disability
- South Carolina:
 - Between 16-21% of PLP students with disabilities listed mild mental disabilities as a primary disability category
 - Approximately 59% of PLP students with a disability had a learning disability listed as a primary disability category

Additional Information Provided by Focus Groups & Surveys from Several States

- Core academic curriculum is significantly modified or specifically designed for the student
- Student is making fairly consistent progress but not at expected (or targeted) level
- Gap between actual performance and targeted level of performance is evident over a period of time (at least 2 consecutive years)
- Gap continues to widen or remains the same
- Despite the provision of “good” interventions, the student is not progressing at the rate expected for grade level
- Accommodations alone do not allow the student to fully demonstrate knowledge; all appropriate accommodations have been exhausted

Learning Characteristics of Population Suggested by Teachers from Various States

- Students require intensive specially designed instruction
- Students require intensive individualized supports
- Instruction may need to be repeated many times in many ways to make progress
- Students are passive learners / non-risk takers

Teacher Opinions on Learning and Meta-Cognitive Deficits in Targeted Students

- Inability to transfer learning or make connections
- Inability to generalize skills and concepts to new situations or problems
- Cannot change topics easily
- Cannot readily access and apply strategies

Other Issues Identified by Teachers

- Students may have other factors requiring focus on prerequisite skills for each grade-level objective, such as:
 - Limited vocabulary and prior knowledge
 - Poor decoding, fluency, and comprehension skill
 - Poor number sense
- Question as to how much of this is due to disability and how much is due to a lack of opportunity to learn

Discussion Point from Regs

- “The assumption... is that many students eligible for an alternate assessment based on modified academic achievement standards are in a regular classroom with children of the same chronological age; they are receiving instruction in the grade-level curriculum but because of their disability are not likely to meet grade level academic achievement standards in the year covered by their IEPs.”

How Does the AA-MAS Fit with the AA-AAS and the General Assessment?

AA-MAS in Accountability

- Every state can count up to 2% of students as proficient using the AA-MAS
- Consideration needs to be given for how this AA-MAS fits in between the AA-AAS and the general assessment
 - Most states agree that it is closer to the general assessment
- How states perceive the relationship between the AA-MAS and the general assessment will drive the definition of Proficient

Questions to Ask about AA-MAS

- Consider how the AA-MAS is supposed to fit between the AA-AAS and the general assessment
 - Do we expect to see smooth transitions from one assessment to the next?
 - How do the performance expectations relate?
 - Is Proficient on the AA-MAS similar in nature to Proficient on the general assessment? Closer to Basic? Or somewhere in between?

Relation of AA-MAS with General Assessment

- Is there an expectation that the AA-MAS may provide a stepping stone for students to reach Proficient on the general assessment?
- Or, is the expectation that students taking the AA-MAS are a unique population that will always need the modifications provided?
- Another way to ask this, is a student who scores Advanced on the AA-MAS prepared to take the general or are they simply exceeding the criterion on their own assessment?

Modified Achievement Levels: What Does Proficiency Mean?



Ground Rules: Standards

- Content standards must remain unchanged
 - Modified academic achievement standards (expectations) may not be based on academic content standards that have been modified or restricted
- Only the achievement standards may be modified
 - Proficient performance on an AA-MAS must represent understanding of grade-level content, albeit through a less rigorous assessment

Regulation § 200.1: Modified Achievement

Standards must:

- Be aligned with a State's academic content standards for the grade in which the student is enrolled
- Be challenging for eligible students, but may be less difficult than grade-level academic achievement standards
- Be developed by grade level, not grade span
- Include at least three achievement levels
- Be developed through a documented and validated standard-setting process that includes broad stakeholder input
 - persons knowledgeable about State's academic content standards
 - special educators knowledgeable about children with disabilities

Additional Guidance

- Modified achievement standards are expected to represent a less difficult expectation of grade-level content standards.
- Final cut scores and performance level descriptors must be documented and submitted for peer review.
- Once the achievement standards have been defined for a particular test, they are applied consistently to all students taking the test so that the meaning of “proficient” is not whimsical, not individually defined, and not determined by an individual teacher or scorer.

Determining Proficiency

- Need to determine what it means to be proficient under Modified Achievement Standards
 - Best to do this by writing descriptors early in the process (true for all assessments)
 - Iterative process of writing descriptors and designing a test
 - PLDs should drive test design
 - PLDs may need to be refined after test has been built to reflect final content

Considerations in Writing Modified Achievement Level Descriptors (MALDs)

- Determine how the MALDs should reflect the content standards
- Determine how the MALDs should reflect the test blueprints
- Think holistically about how a student moves from one performance level to the next, one grade to the next, and one assessment group to the next
- Think about changes in the cognitive complexity of the task versus the addition of supports

Comparing the Grade-level Descriptors to the MALDs

- Are the knowledge and skills required of Proficient with MAS the same as with GLAS but with more supports and scaffolding, or are the knowledge and skills different?
- Is the Proficient level on the MAS somewhere between Basic and Proficient on the GLAS or on a different plane?
- Is Proficient or Advanced on the MAS indicative of the preparedness for the general assessment?

Strategies for “Modifying” Grade Level Achievement Level Descriptors

- Reduce cognitive complexity of knowledge and skills at each level (verb)
 - Move from describe to identify or from analyze to describe (but have rationale regarding learning)
- Provide examples
 - Elements of narrative text could be main idea, main character, and setting for modified and add supporting characters and conflict for general
- Add required supports
 - “Given definitions...” or “Using segmented passages...”

Example of Idea of Writing PLD

“between” Basic and Proficient: Reading

Basic

- Basic students have limited ability to identify elements of literary works, such as character development, plot development, setting, conflict, and point of view.

Proficient

- Proficient students are able to identify and describe elements of literary works, such as character development, plot development, setting, conflict, and point of view.

Can you see where “proficiency” for the AA-MAS might fall between these two statements?

Example of Defining Reading Proficiency

General

- Students performing at this level can determine the main idea and supporting details in informational texts. They use common organizational and textual features in understanding texts. They recognize stated themes and make connections in literature.

Modified

- Students performing at this level should be able to determine the main idea and supporting details in informational texts. They can make and support generalizations using evidence from the text. They use common organizational and textual features to help them understand text and can recognize stated themes when provided with graphic supports, such as Venn diagrams or timelines.

Scaffolding / Content Supports

- Think about how the assessment design might be projected in the MALDs.
- How true is it that a proficient student on the modified assessment may have a similar set of knowledge and skills as the proficient student on the general assessment, but may require more supports to demonstrate that knowledge?

Example of Scaffolding in a MALD

- **Grade level ALD:** Students can describe elements of literary text.
- **Modified ALD:** When literary text is segmented appropriately, students can describe elements within each chunk of the text.

Question to Ask in Drafting MALDs

- Are the knowledge and skills expected of students taking the AA-MAS similar to those expected from students taking the grade-level test, but scaffolds will be applied to help them attain that level?
- Are the knowledge and skills different so that “Proficient” for the AA-MAS may be less complex than “Proficient” for the general assessment?

Modifying Items

Identifying Items for Modification

- One strategy many states have employed is to start with the general assessment and review the items to determine appropriate modifications for this population
- Not every item will need to be modified
 - Several states' data show that students do well on certain items, particularly straight identification items
 - Fewer than 40% of items on Georgia's reading test were identified as needing modification

Questions to Guide Review of Items

- What is the focus of each item: application of skills, fact-based information, conceptual understanding, problem solving *AND what might make this difficult?*
- What is the vocabulary load of each item and the overall readability and text “density” for each item?
- Do the charts, tables, graphs, artwork, visuals, spacing used support *OR perhaps detract* from understanding?
- What is the “closeness” of distracters to each other?
- What is the complexity or abstractness of ideas presented in reading items (e.g., use of figurative language vs. literal meanings; theme vs. main idea)?
- How many steps are required for mathematics items?

Examples of Areas for Modification:

Reading (from Hess, McDivitt, Fincher, 2008)

- **Passages**

- Genre Type & Genre Characteristics

- **Content Strand/Concept Tested**

- Comprehension (Literal vs. Inferential)
- “Balance” and order of items

- **Features**

- Vocabulary
- Wordiness
- Cognitive Demand
- Use of Negatives

- **Format**

- Spacing
- Graphics

- **Other, including Source of Challenge**

Types of Modifications

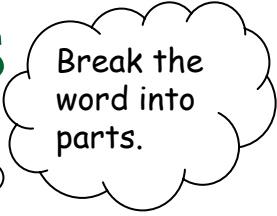
■ Enhancements

- Providing hints, definitions, simple examples
- Adding visuals, graphic organizers to aid conceptual understanding or focus

■ Revisions

- Simplifying Language/Vocabulary “Load”
- Eliminating Extraneous Text/Words

Possible Types of Enhancements



Break the word into parts.

- Add a Helpful Hint in a “Thought Balloon”
 - Definition, key word or phrase
 - Reminder of approach to help solve a multi-step problem (e.g., circle the information you need to solve this)
- Provide a Scaffold
 - Graphic organizer (e.g., timeline for organizing chronology)
 - Table, graph, chart, or visual to enhance *conceptual understanding* (e.g., Venn diagram to compare or contrast)
 - Key words, phrases, definitions (e.g., sidebar glossary), introductions to passages

Possible Types of Revisions

- Simplify language in question/stem and/or distracters
- Simplify graphics, visuals, etc.
- Eliminate extraneous information
- Substitute another (*more familiar*) word without changing the construct
- Reformat items or passages (e.g., adding more white space, size of text)
- Adjust layouts (e.g., reorder items or passages)
 - Order items to support engagement (e.g., easier items before more difficult items; simple applications of concepts before more complex applications)
- Separate reading passages into segments, followed by related questions

Other Presentation Modifications

- Add white space
 - between paragraphs of passages
 - between number sequences or graphics
- Number paragraphs or lines
- Put fewer items on a page
- Provide more work space in booklet
- Call attention to key words/phrases
 - Enlarge text
 - Underline, bold, CAPS key words/phrases/symbols

Sample Mathematics Item #1

(reorganize & simplify text, underline key word)

BEFORE

Bill was discussing the total sales in his store this week. He said that on Monday there were twice as many sales as Thursday, less 13. If there were 135 sales on Thursday, how many sales did he have on Monday?

AFTER

Bill had 135 sales on Thursday. **The sales on Monday were twice as many as Thursday, less 13.**

How many sales did Bill have on Monday?

Sample Mathematics Item #2

(change format & simplify reading load)

BEFORE

- **Mary has six white shirts, four blue shirts, and five red shirts in her dresser. If she randomly chooses...**

AFTER

Mary has

6 white shirts

4 blue shirts

5 red shirts

If she randomly chooses...



Sample Reading Item #1

(using more familiar words in distracters; shortening stem)

BEFORE

In paragraph 9, what does the word genuine mean?

- a. real
- b. pretend
- c. content
- d. anxious

AFTER

In paragraph 9, what does genuine mean?

- a. real
- b. pretend
- c. **happy**
- d. **worried**

Sample Reading Item #2

(underlining key word; simplifying distractors)

Before...

Which best describes Jason's father?

- a. strict and unwilling to listen to Jason
- b. curious and puzzled by the empty box
- c. angry and sad that Jason hid
- d. understanding and patient with Jason

After...

Which best describes Jason's father?

- a. unwilling to listen
- b. puzzled by the empty box
- c. angry that Jason hid
- d. understanding Jason's feelings



Sample Reading Item #3 (simplify stem and make distractors complete sentences)

The United States reduced the number of immigrants allowed to enter the country because

- A. the United States already had too many people.
- B. the immigrants were taking away jobs from American workers.
- C. the immigrants had too many hardships to face in America.
- D. the country that the immigrants came from was angry about their leaving.

Why did the United States reduce the number of immigrants?

- A. The United States already had too many people.
- B. The immigrants were taking away jobs from American workers.
- C. The immigrants had too many hardships to face in America.
- D. The country that the immigrants came from was angry about their leaving.

Segmenting Reading Passages

- Chunking reading passages is a type of organizational scaffold that reduces the load on working memory
 - Divide into conceptually meaningful subparts whenever possible
 - Otherwise, chunk passages into equal lengths

Example of “Segmenting” a passage

Carol Ryrie Brink lived with her Grandmother Caddie and two aunts on a tiny farm in Idaho. The farm was a great place to live. Besides wonderful tall climbing trees, it had cats and chickens and a barn that held her pony, Tommy, whom she rode all over the countryside and through the streets of town.

Even so, Carol was sometimes lonely. She would climb to the top of her favorite tree and make up stories to entertain herself. Carol knew all about stories. The favorite part of her day was when Grandmother Caddie would sit with her and tell stories about when she was a pioneer girl, and her family had moved from Boston to the wilderness of Wisconsin. Grandmother Caddie told Carol story after story about the adventures of her and her brothers.

Answer questions 1–6 in your answer booklet.

1. Why did Carol enjoy hearing her grandmother’s stories?
 - A. She could listen to her grandmother’s stories from the top of a tree.
 - B. She enjoyed how her grandmother read stories aloud.
 - C. She thought her grandmother’s adventures were unusual.
 - D. She liked to imagine her grandmother as a pioneer girl.



What Should Not Be Considered

- Adapting passages in any way that would make them “below grade level”
- Significantly reducing the number of items per passage or adding many more items to fewer passages
 - Ratio of items to passages should stay approximately the same although the overall number can change
- Revising questions or answer options in such a way as to change the nature of the item and/or the construct

Controversial Options

- Reducing the length of a passage or simplifying the passage
 - Can we do this without reducing the grade level?
 - Is “on grade level” related to reading level (lexile) or content?
- Reducing the number of option choices (usually from 4 to 3)
 - Is that a meaningful change or are we simply improving the guessing probability?
- Reducing the number of items
 - How do we do this without changing the construct?
 - How do you select which items/passages to remove?

Important Points

- Modifications should increase access not just reduce difficulty
- The modification may serve to lower the reading level of a test question, or it may in some other way make the question more accessible
- However, the content being measured must be retained and the construct cannot change
- To accomplish this goal effectively we need to understand better how students with disabilities process information and learn

Conclusion

- We are still learning how to design a good AA-MAS
- The studies done on AA-MAS to date will also improve our general assessments
- Understanding this population, how they learn (and how it may be different from those without disabilities), and the barriers to their demonstrating knowledge and skills on a general assessment is our most important challenge