

Assessment Tools



Using Assessment Items in Instruction

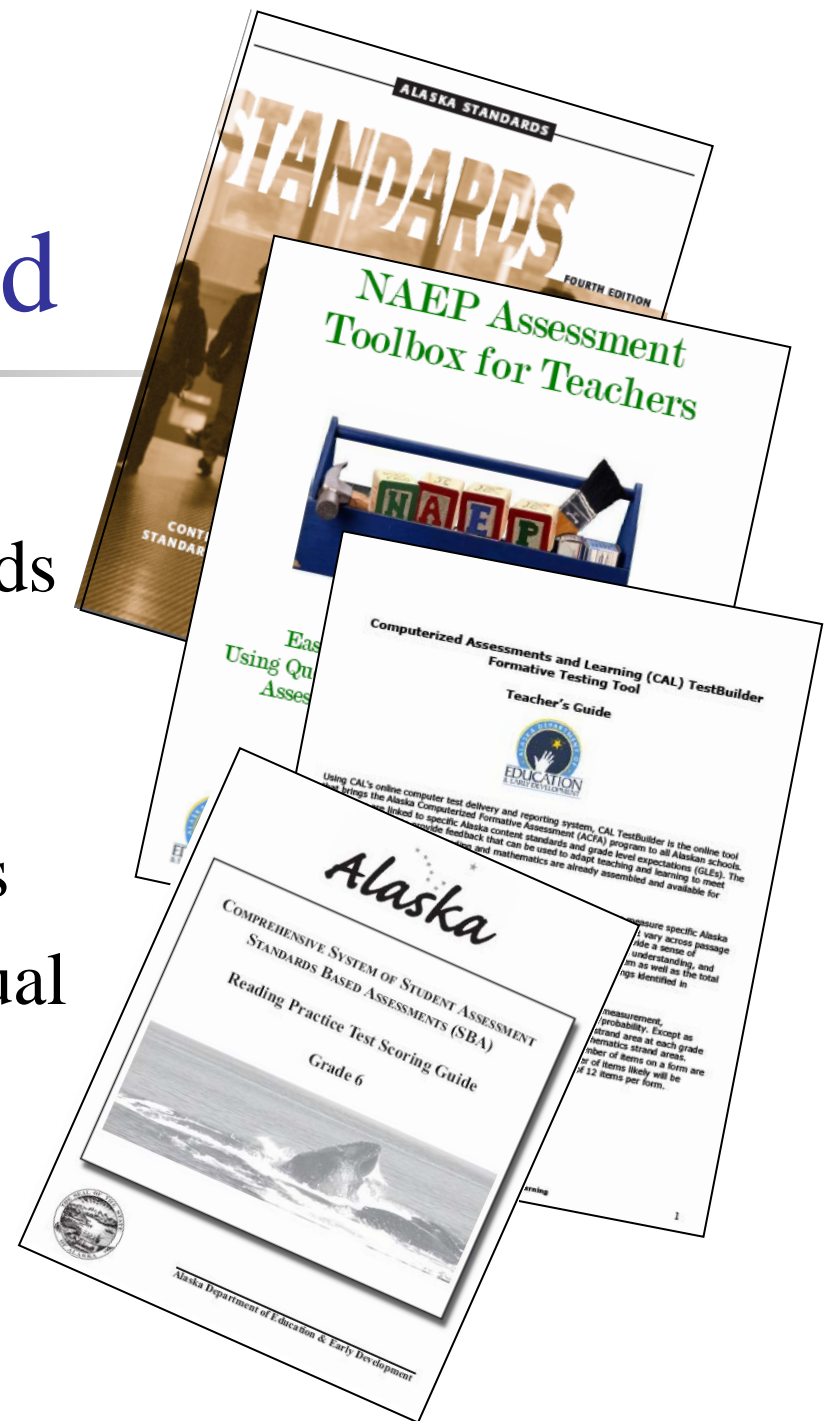
Department of Education & Early Development

Winter Education Conference

January 16 and 17, 2008

Materials Needed

1. Alaska Content and Performance Standards
2. SBA item samplers
3. NAEP Assessment Toolbox for Teachers
4. ACFA Teacher Manual and test results





Overview

- Purpose and potential
 - SBA Item Samplers
 - NAEP Questions
 - ACFA - Interim formative assessment



Using Test Items Can...

1. Reinforce reasoning strategies
2. Improve students' abilities to self-assess
3. Provide teachers feedback for data driven decision making
4. Illustrate GLEs for students
5. Provide feedback to target instruction

SBA Item Samplers/Practice Tests

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- Multiple-choice and constructed-response questions that have been field tested
- Scoring guides for constructed-response questions
- Tables identifying GLEs assessed by each item
- Student exemplars for every score level for constructed-response questions

SBA Item Samplers

- Scoring Guide is the key to using SBA constructed response test items.

EED - Assessment, Accountability and Student Information - Microsoft Internet Explorer provided by Info Tech

Address: http://www.eed.state.ak.us/ts/assessment/SBA_ItemSamplers.html

Grade Level	Test Book	Answer Booklet	Test Administration Directions (TAD)	Scoring Guide
Two booklets for grades 3 - 4: Reading — one test/answer booklet; Writing/Mathematics — one combined test/answer booklet.				
3	Reading Test/Answer Booklet		Grade 3 TAD	Reading Answer Key/Scoring Guide Writing Answer Key/Scoring Guide Mathematics Answer Key/Scoring Guide
	Writing/Mathematics Test/Answer Booklet			
4	Reading Test/Answer Booklet		Grade 4 TAD	Reading Answer Key/Scoring Guide Writing Answer Key/Scoring Guide Mathematics Answer Key/Scoring Guide
	Writing/Mathematics Test/Answer Booklet			
Separate test book and answer booklet for grades 5 - 9: Reading/Writing/Mathematics (RWM) — one test book and separate answer booklet.				
5	Reading/Writing/Mathematics Test Book	RWM Answer Booklet	Grade 5 TAD	Reading Answer Key/Scoring Guide Writing Answer Key/Scoring Guide Mathematics Answer Key/Scoring Guide
6	Reading/Writing/Mathematics Test Book	RWM Answer Booklet	Grade 6 TAD	Reading Answer Key/Scoring Guide Writing Answer Key/Scoring Guide Mathematics Answer Key/Scoring Guide
7	Reading/Writing/Mathematics Test Book	RWM Answer Booklet	Grade 7 TAD	Reading Answer Key/Scoring Guide Writing Answer Key/Scoring Guide Mathematics Answer Key/Scoring Guide
8	Reading/Writing/Mathematics Test Book	RWM Answer Booklet	Grade 8 TAD	Reading Answer Key/Scoring Guide Writing Answer Key/Scoring Guide Mathematics Answer Key/Scoring Guide
9	Reading/Writing/Mathematics Test Book	RWM Answer Booklet	Grade 9 TAD	Reading Answer Key/Scoring Guide Writing Answer Key/Scoring Guide Mathematics Answer Key/Scoring Guide
10	Reading Test/Answer Booklet		Grade 10-HSGOE	

SBA Item Samplers



SECTION II: Grade 6 Reading Test Map

Last page of Scoring Guide has test map showing GLE assessed by each writing question

READING		
Sequence	GLE	Key
Passage	Icehotel	
1	2.5.1	D
2	2.9.1	A
3	2.1.2	A
4	2.2.3	B
5	2.5.2	B
6	2.2.4	D
7	2.1.2	A
8	2.2.4	Short Constructed Response
Passage	Little by Little, Piece by Piece	
9	2.2.1	B
10	2.1.4	A
	2.7.3	C
12	2.8.1	C
13	2.8.1	C
14	2.5.2	B
15	2.10.1	Extended Constructed Response
Passage	Sky-Fish	
16	2.2.4	B
17	2.7.3	A
18	2.1.2	B
19	2.1.4	D
20	2.2.1	C
21	2.10.1	C
Passage	Dick Mackey—Making Iditarod History	
22	2.5.1	B
23	2.1.2	C
24	2.2.1	A



SBA Item Samplers

- Student Ability to Self-Assess
 - To effectively learn to self-assess own work, students can evaluate existing student samples with scoring guides/rubrics



SBA Item Samplers

- Scoring guides and rubrics
 - “I ask questions about writing: should students receive clear, detailed instruction—entire lessons—on each respective element of a writing rubric? And isn’t repeated teacher modeling accompanied by exemplars of good written work essential to understanding these criteria of good writing? And shouldn’t students be taught—very carefully and thoroughly—to evaluate their own written work with these rubrics?”

Results Now: How We Can Achieve Unprecedented Improvements in Teaching and Learning. Alexandria, VA: Association for Supervision and Curriculum Development. Schmoker, Mike (2006).



SBA Item Samplers

- Activity - Working in pairs or table groups (10 minutes)
 1. identify the prompt
 2. review the scoring guide and clarify any questions
 3. read and score the 2 samples of student work
 4. compare your results and share



SBA Item Samplers

GLE measured: 2.10.1; The student connects themes by identifying author's message, theme, or purpose, stated or implied.

- Constructed response one:
 - This response demonstrates a thorough understanding the task. It provides a possible lesson that could be learned ("it is good to work hard"). Three examples are given from the passage to suggest this lesson. **Scored as a 4**

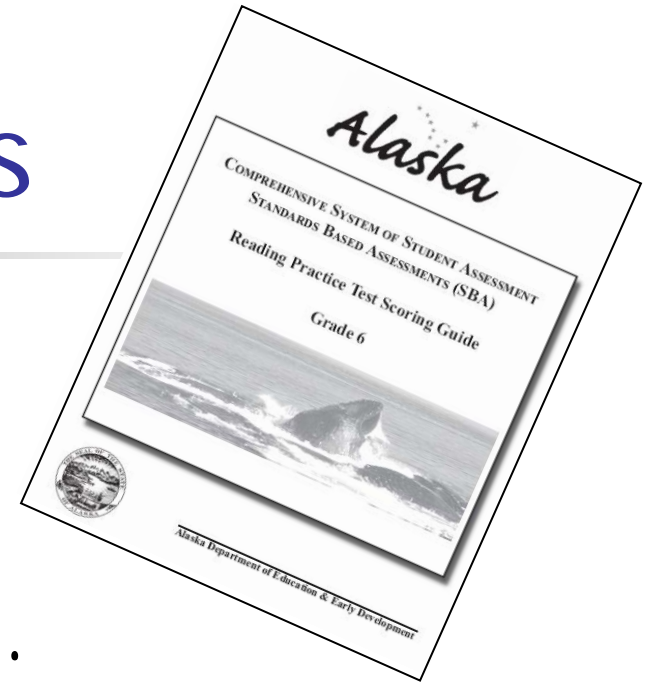
- Constructed response two:
 - This response demonstrates a limited understanding of the task. "To do what you are told" is too vague to receive credit as a lesson learned from this passage. However, two examples from the passage that imply a less are provided. **Scored as a 2**

SBA Item Samplers

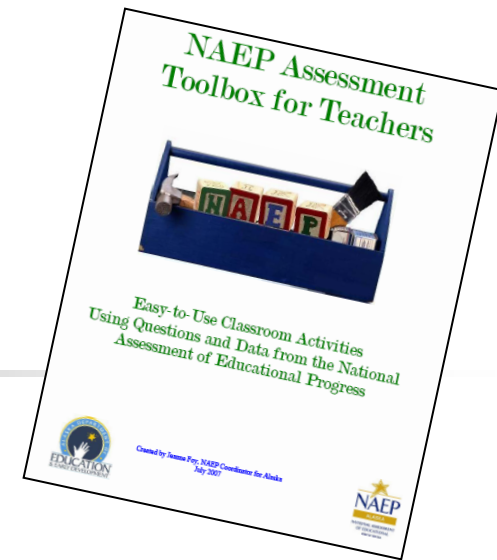
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- Share your thoughts...



NAEP Test Items



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- What Is the NAEP?
 - The nation's only nationally representative, continuous assessment of what the nation's students know and can do in school
 - Administered in Alaska as part of NCLB every other year since 2003 for
 - Grade 4 mathematics and reading
 - Grade 8 mathematics and reading



NAEP Test Items

- NAEP Assessment Toolbox for Teachers
 - A collection of easy-to-use worksheets using NAEP assessment items
 - Each item linked to state GLE
 - Available on state NAEP web page in Word format: www.eed.state.ak.us/tls/assessment/naep.html



NAEP Test Items

- National Reading Panel Recommendation
 - Teacher guide the reader or model for the reader the actions that the reader can take to enhance the comprehension processes used during reading

NAEP Data Explanation (p. 3*)

5. What did Shannon Lucid miss while in space?

- A) Eating her favorite snacks
- B) Riding a stationary bicycle
- C) Talking to her family
- D) Feeling the sun and the wind

2005 National Performance Results	
Score	Percentage of Students
Correct	50%
Incorrect	50%
Omitted	1%
0	100

Note:

- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

Alaska Students: 50% Correct

The first table gives a quick overview of student performance. Nationally, 50% of students got this question correct.

The heading shows this question was part of the 2005 NAEP administration.

Specific Alaska data is given at the bottom of the table.

	A	B	C	D*	Omitted	Missing
	ROW Pct.	ROW Pct.	ROW Pct.	ROW Pct.	ROW Pct.	ROW Pct.
All students	14	6	29	50	1	3

For multiple-choice questions, a second table shows how many students chose each possible response. For example, 14% of students chose A and 6% chose B. The correct answer (D) is marked with an asterisk. Omitted or missing is the percentage of students who did not answer the question. This is national performance data.

*Page number in Assessment Toolbox



NAEP Test Items

- NAEP Reading Items
 - Using NAEP student performance data and response cards to gauge the understanding of the whole class
- NAEP activity (15 minutes)



NAEP Test Items

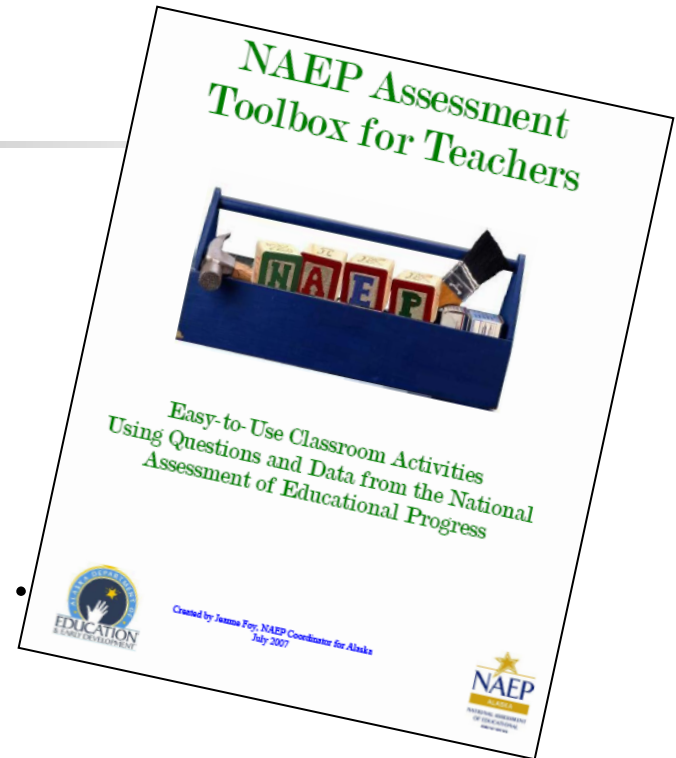
- “Moment of contingency”
 - Move forward with instruction
 - Reteach concept
 - Whole-class discussion
 - Peer teaching

NAEP Test Items

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- Share your findings...



NAEP Questions

The Nation's Report Card (home)

Explore NAEP Questions

After each assessment, NAEP releases dozens of sample questions to the public—more than 2,000 questions are currently available. The tools featured here can be used to supplement classroom instruction, provide additional insight into the content of the assessment, and show what students nationally or in your state or district know and can do. Explore the tools and find out more about NAEP.

What's New?

- 2007 [mathematics](#) and [reading](#) assessments at grades 4 and 8
- 87 multiple-choice and 41 constructed-response questions from the 2007 mathematics and reading assessments now available in the Questions Tool

Questions Tool >>



Explore a database of released NAEP questions, student responses, question-level data, and scorer's commentary.

Item Maps >>



See examples of what students at each achievement level are likely to know and can do in a subject.

Test Yourself >>



Try out actual questions administered to students in the NAEP assessments.

Scoring >>



Learn how NAEP questions are scored.

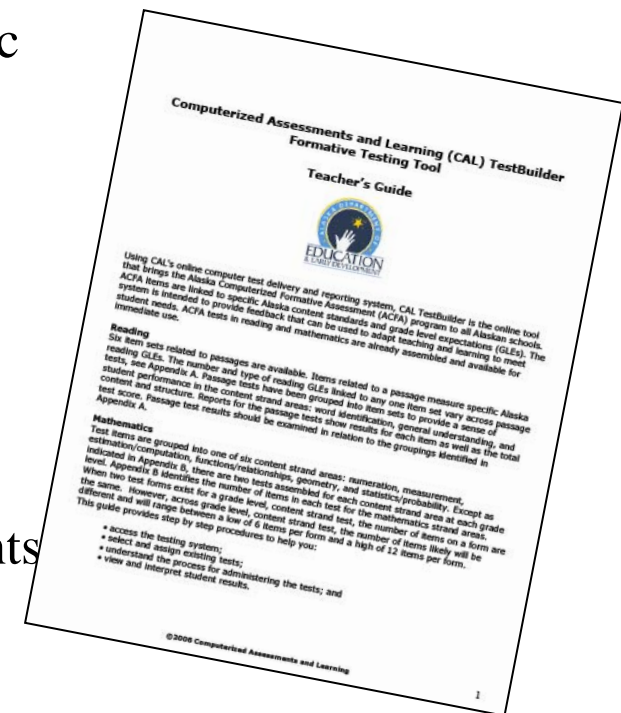
Explore the latest released questions from the 2007 [mathematics](#) and [reading](#) assessments.

Bank of NAEP reading/math questions linked to Alaska GLEs at <http://www.eed.state.ak.us/tls/assessment/naep.html>. All released NAEP questions for all subjects at <http://nces.ed.gov/nationsreportcard/itmrls/>.

Alaska Computerized Formative Assessment

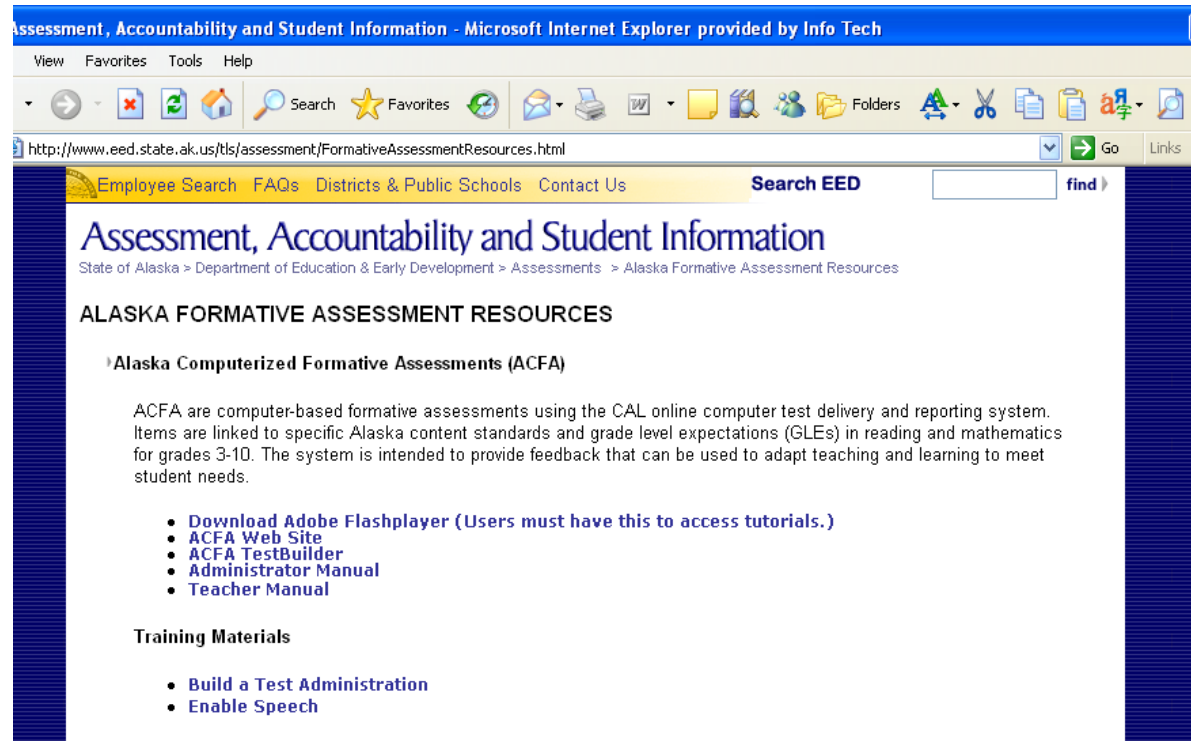
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- What is ACFA?
 - Interim formative assessment
 - In depth look at understanding GLE in context
 - Computerized, accurate, and specific
 - Measurement for analysis
- When do I use it?
 - During the school year
 - Small groups or whole class
 - Before and after a unit of study
 - When discussing results with students
 - During collaborative meetings



ACFA Interim Assessment

Districts can find information for preparing computers as well as training materials at the department website.



The screenshot shows a Microsoft Internet Explorer browser window displaying the website for the Alaska Department of Education & Early Development. The address bar shows the URL: <http://www.eed.state.ak.us/tls/assessment/FormativeAssessmentResources.html>. The page title is "Assessment, Accountability and Student Information". The navigation menu includes "Employee Search", "FAQs", "Districts & Public Schools", and "Contact Us". The main content area is titled "ALASKA FORMATIVE ASSESSMENT RESOURCES" and features a section for "Alaska Computerized Formative Assessments (ACFA)".

Assessment, Accountability and Student Information
State of Alaska > Department of Education & Early Development > Assessments > Alaska Formative Assessment Resources

ALASKA FORMATIVE ASSESSMENT RESOURCES

Alaska Computerized Formative Assessments (ACFA)

ACFA are computer-based formative assessments using the CAL online computer test delivery and reporting system. Items are linked to specific Alaska content standards and grade level expectations (GLEs) in reading and mathematics for grades 3-10. The system is intended to provide feedback that can be used to adapt teaching and learning to meet student needs.

- [Download Adobe Flashplayer \(Users must have this to access tutorials.\)](#)
- [ACFA Web Site](#)
- [ACFA TestBuilder](#)
- [Administrator Manual](#)
- [Teacher Manual](#)

Training Materials

- [Build a Test Administration](#)
- [Enable Speech](#)



ACFA Interim Assessment

- Activity 15 minutes
 1. locate the ACFA Teachers Manual and test results in your materials
 2. review each report and answer the prompts presented
 3. share your discovery at your table

What can be observed?



Immediate Results

What questions are generated from this immediate report?

SESSION ID: TTYNHB5849

Name: Pre-test reading A1

Description: Clocks

Detailed Report:  

[download csv file for spreadsheet](#)

	1	2	3	4	5	6	7	8	9	10	11	12	score
<input type="checkbox"/> #rule2001	1	A	1	1	1	1	D	1	1	1	1	1	10.12 83.33%
<input type="checkbox"/> #rule2002	1	1	1	1	1	1	1	1	1	1	1	1	12.12 100.00%
<input type="checkbox"/> #rule2003	1	A	1	1	1	1	D	1	1	1	1	1	10.12 83.33%
<input type="checkbox"/> #rule2004	1	A	1	1	D	1	1	1	1	1	1	1	10.12 83.33%
<input type="checkbox"/> #rule2005	1	1	C	B	C	B	B	C	A	B	B	B	2.12 16.67%
<input type="checkbox"/> #rule2006	1	A	1	1	1	1	1	1	1	1	1	1	11.12 91.67%
<input type="checkbox"/> #rule2007	1	A	B	C	D	1	D	1	1	C	D	A	4.12 33.33%
<input type="checkbox"/> #rule2008	1	1	1	1	1	C	D	1	1	1	1	1	10.12 83.33%
<input type="checkbox"/> #rule2009	1	A	1	1	1	1	1	1	-	1	1	1	10.12 83.33%
<input type="checkbox"/> #rule2010	1	A	1	1	1	1	1	1	1	1	1	1	11.12 91.67%
score	10.10	3.10	8.10	8.10	7.10	8.10	5.10	9.10	8.10	8.10	8.10	8.10	
	100%	30%	80%	80%	70%	80%	50%	90%	80%	80%	80%	80%	

[check all](#) :: [delete selected](#) :: [reactivate selected](#)

Reports

1. What is the significant difference between these two reports?
2. How might they be used?

Pre-test reading A1

Student Score Listing - Alphabetical

Comprehensive - Includes questions from all assessed

Subject: Reading

Grade: 6

Group: All Students

<u>Student Name</u>	<u>Admin</u>	<u># Correct</u>	<u>% Correct</u>	<u>Confidence</u>
student 01	0	10 / 12	83.3%	
student 02	0	12 / 12	100.0%	
student 03	0	10 / 12	83.3%	
student 04	0	10 / 12	83.3%	
student 05	0	2 / 12	16.7%	
student 06	0	11 / 12	91.7%	
student 07	0	4 / 12	33.3%	
student 08	0	10 / 12	83.3%	
student 09	0	10 / 12	83.3%	
student 10	0	11 / 12	91.7%	

Pre-test reading A1

Student Score Listing - Highest to Lowest

Comprehensive - Includes questions from all assessed

Subject: Reading

Grade: 6

Group: All Students

<u>Student Name</u>	<u>Admin</u>	<u># Correct</u>	<u>% Correct</u>	<u>Confidence</u>
student 02	0	12 / 12	100.0%	
student 06	0	11 / 12	91.7%	
student 10	0	11 / 12	91.7%	
student 01	0	10 / 12	83.3%	
student 03	0	10 / 12	83.3%	
student 04	0	10 / 12	83.3%	
student 08	0	10 / 12	83.3%	
student 09	0	10 / 12	83.3%	
student 07	0	4 / 12	33.3%	
student 05	0	2 / 12	16.7%	

What can be observed?

Reports

- By understanding the MCI, how might a teacher make considerations before reviewing other reports or discussing results?

Pre-test reading A1

Student-Problem (S-P) Table

(with Modified Caution Index)

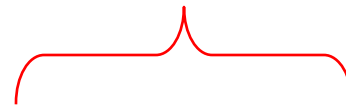
Comprehensive - Includes questions from all assessed

Subject: Reading

Grade: 6

Group: All Students

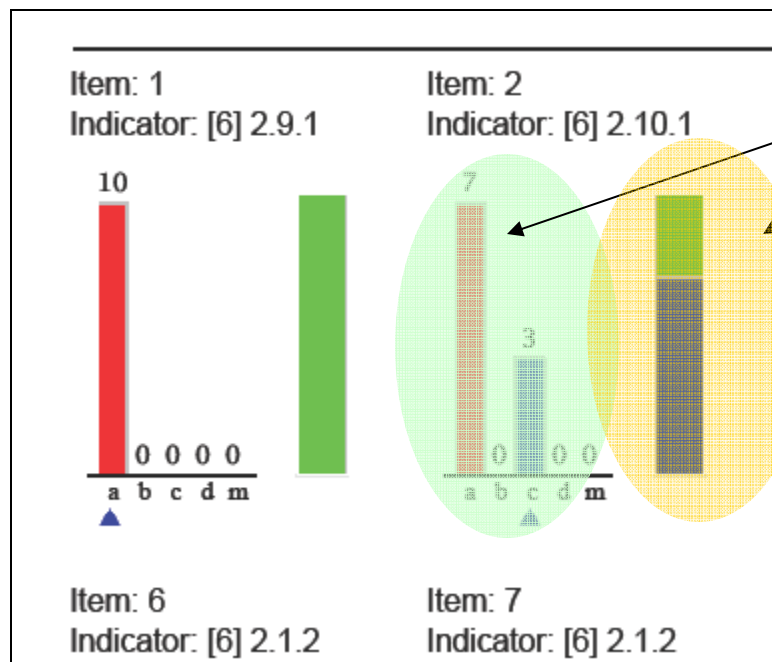
Student Name	% Correct	MCI	Easiest.....Hardest													
			1	8	3	4	6	9	10	11	12	5	7	2		
student 02	100.0%	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
student 06	91.7%	0	1	1	1	1	1	1	1	1	1	1	1	1	1	A
student 10	91.7%	0	1	1	1	1	1	1	1	1	1	1	1	1	1	A
student 01	83.3%	0	1	1	1	1	1	1	1	1	1	1	1	1	D	A
student 03	83.3%	0	1	1	1	1	1	1	1	1	1	1	1	1	D	A
student 04	83.3%	18	1	1	1	1	1	1	1	1	1	1	1	D	1	A
student 08	83.3%	45	1	1	1	1	C	1	1	1	1	1	1	D	1	1
student 09	83.3%	27	1	1	1	1	1	-	1	1	1	1	1	1	1	A
student 07	33.3%	0	1	1	B	C	1	1	C	D	A	D	D	D	A	
student 05	16.7%	54	1	C	C	B	B	A	B	B	B	C	B	1	1	
Percent of students with correct answer:			100	90	80	80	80	80	80	80	80	80	70	50	30	



- What is assumed about Student 05?

What can be observed?

Reports



It is important to note each item is represented by **two separate** bar graphs.

1. How does the graphing assist in the analysis?
2. How might a teacher use the reference to the GLE to adjust her instruction?



What can be observed?

Reports

1. Looking at the group statistics, how might a teacher compare these results to the post-test – what information can she learn?

Group Statistics

Number of students: 10
Mean: 75.00 %
Median: 83.33 %
Mode: 83.3%
Standard Deviation: 27.22 %
Range: 83.33 %
High Score: 100.00 %
Low Score: 16.67 %
25th percentile: 58.33 %
50th percentile: 83.33 %
75th percentile: 87.50 %

Easiest Items

Item #1 (indicator [6] 2.9.1) had 10 correct responses.
Item #8 (indicator [6] 2.2.4) had 9 correct responses.
Item #3 (indicator [6] 2.9.2) had 8 correct responses.

Hardest Items

Item #2 (indicator [6] 2.10.1) had 3 correct responses.
Item #7 (indicator [6] 2.1.2) had 5 correct responses.
Item #5 (indicator [6] 2.1.3) had 7 correct responses.

ACFA Interim Assessment

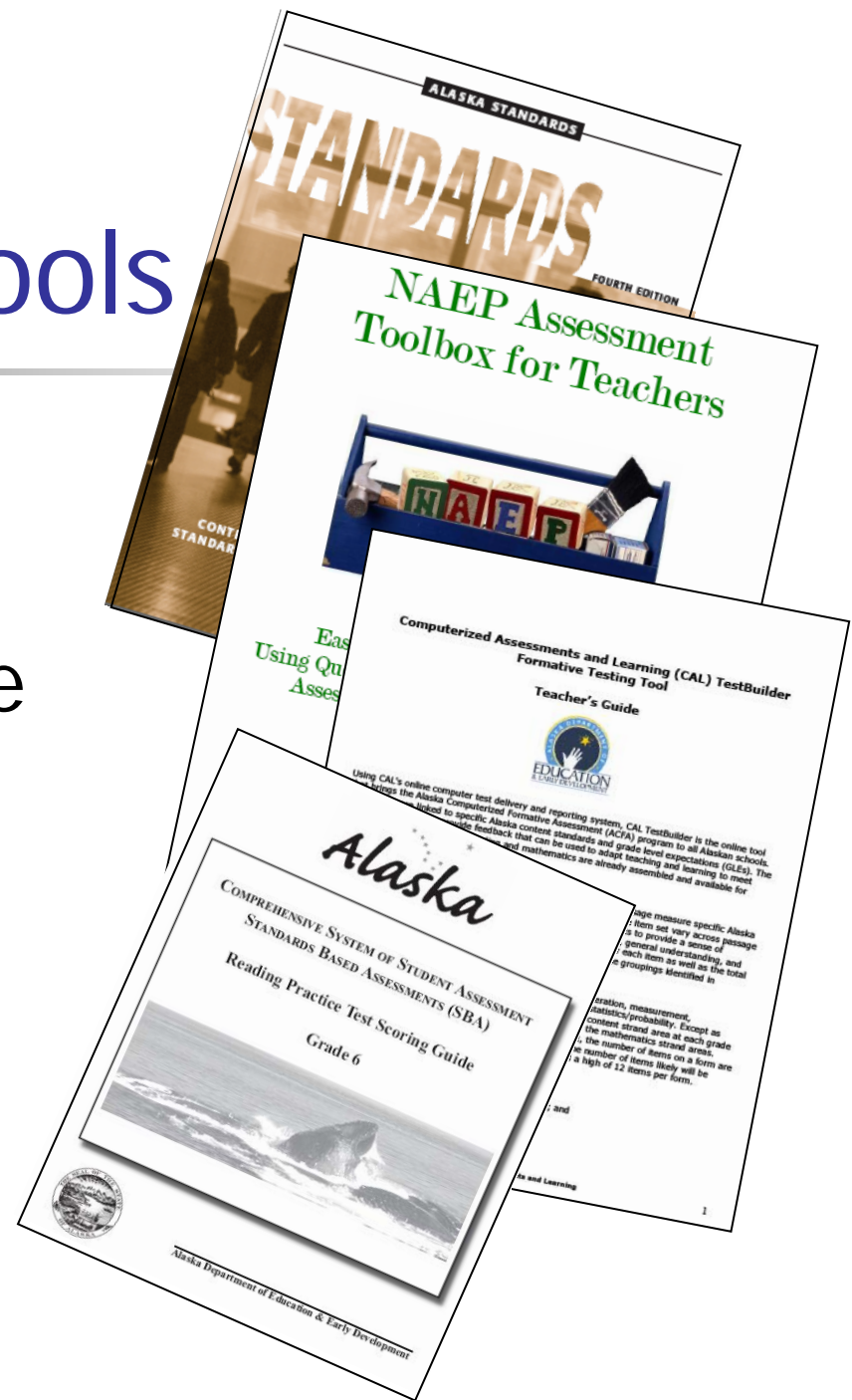
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- Share your findings...



Assessment Tools

- How will you share these assessment tools with your district?





Resources and Support

- Alaska Assessment website: <http://www.eed.state.ak.us/tls/assessment/>
- SBA Item Sampler website:
http://www.eed.state.ak.us/tls/assessment/SBA_ItemSamplers.html
- NAEP Assessment Toolbox for Teachers website:
<http://www.eed.state.ak.us/tls/assessment/naep.html>
- Alaska Computerized Formative Assessment (ACFA) website:
<http://www.eed.state.ak.us/tls/assessment/FormativeAssessmentResources.html>
- Jeanne Foy, NAEP Coordinator for Alaska, jeanne.foy@alaska.gov
- Janet Valentour, Alternative and ELP Assessment Program Manager,
janet.valentour@alaska.gov