

Part V: Linking to Content Standards



Is it Reading? Is it Mathematics?

Part V: Linking to Content Standards
Is it Reading? Is it Mathematics?

Purpose of Part V

The purpose of Part V is to apply strategies for linking to grade-level content instruction, to identify student work that reflects appropriate constructs in reading and mathematics, and to apply strategies for selecting reading and mathematics grade-level constructs to include in an alternate assessment.

Outcomes for Part V:

- apply strategies for linking to grade level content instruction
- identify student work that reflects appropriate constructs in reading and mathematics
- apply strategies for selecting reading and mathematics grade level constructs to include in an alternate assessment

Page 2 | Part V: Is it Reading/Math? | n3c

Alternate Assessment - Alternate Achievement Standards Development Site Map

- Articulate policy guidance
- Define assessment effective practice
- Define population to be assessed
- Define a theory of learning for assessed population
- Review and articulate academic content standards
- Use tools to evaluate content
- Produce a content linking chart
- Consider alignment procedures

Page 3 | Part V: Is it Reading/Math? | n3c

This section deals primarily with the cognition vertex of the assessment triangle as the content standards define what students should know and be able to do. It secondarily connects to the observation vertex by specifying what student performance(s) might look like.

Defining Linkage

Three questions must be asked when determining whether or not instruction is linked to the grade-level curriculum expectations. These questions are as follows:

- Is it content? – Is the focus of instruction from the English Language Arts or Mathematics curriculum?
- Does it access the grade level content standard? – Is the focus of instruction based on a content standard from the same grade of the student’s chronological age?
- Is it meaningful to the student? – Is the focus of instruction on a skill that is immediately useful or that will be useful in the near future?

The intent of the grade-level content standard must remain intact and instruction must occur using the same materials as all students (or an adapted version) and appropriate assistive technology.

Have You Checked All the Angles?

Grade Level Curriculum Instruction with Expectations for Content Area Learning

Is it “Square” and is it “Plumb”...?

A close look at what is taught ...

- Is it really content?
- Does it access the grade level content standard?
- Is it meaningful?

Page 4 | Part V: Is it Reading/Math? | n3c

Grade Level Curriculum + Expectations = Linkage

Students with the most significant cognitive disabilities:

- receive instruction on grade level content standards (may be at a lower complexity level) within the context of grade level curriculum ensuring that the *intent of the grade level content standard remains intact*
- use the same materials, or adapted version of the materials, and appropriate assistive technology to gain access

Page 5 | Part V: Is it Reading/Math? | n3c

Functionality

Historically, functionality has been defined as typical adult outcomes, or as skills that allow a student to perform in the community or adult life independently. As we become more familiar and skilled with the application of functionality, some professionals are beginning to question the interpretation or application of functionality and what is truly functional for students with the most significant cognitive and physical disabilities.

Additionally, many teachers question how to balance the traditional functional curriculum for students with the most significant cognitive disabilities with the need to assess and report student access to and progress within a state's general curriculum. Teachers express concerns that the importance of the functional curriculum for students with the most significant cognitive disabilities will be lost and replaced solely by the general education curriculum. However, it is understood that many aspects of the functional curriculum continue to be extremely important for these students. There is no attempt to replace teaching of the functional curriculum solely with the general curriculum; instead to seek a balance of the two. NCLB 2002 requires us to only assess a student's progress in the general curriculum. Functional skills are best addressed though the IEP.

Some Words about "Functionality"

Students with the most significant cognitive disabilities should:

- be taught skills that will enhance their independence in the next critical environment
 - those skills must be embedded in natural routines and in socially valid contexts
 - those skills might not be assessed
- be taught academic content because it is "functional" and socially valid
- not have to wait until they are able to make a bed before they are taught to read or identify initial letter sounds or before they are taught literature
- be presumed competent and not denied instruction offered to students of the same age (grade level content standards and curriculum)

Page 6 | Part V: Is it Reading/Math? | n3c National Alternate Assessment Center

For discussion about functionality using an example of one student, see Power point speaker notes.

Disclaimer about individual state definitions of reading

Is it Reading?

- Individual states define reading in a variety of ways; some define reading comprehension separately from decoding. Please recognize that your state's definition may result in a different interpretation of the following slides.

Page 7 | Part V: Is it Reading/Math? | n3c National Alternate Assessment Center

Linking to a State Standard

When trying to design instruction for all students, teachers should start with the content standard and determine what all students are expected to learn from the standard. Based on the standard, look at the instructional activities being taught and ask three questions about the instructional task: (1) Is this activity reading (or math, or science, etc.); (2) Is this activity meeting the grade level content standard for the chronological age of the student; (3) Is it meaningful to the student? The questions and process are the same whether we are looking at reading, math, science or social studies. However, we are focusing on reading and math.

Ensure that you read the speaker notes for the slides about linking to the state standards for Martha, Jordan, Sarah, and Josh.

Martha is working on characteristics of the historical setting of a text.

Linking to a State Standard: Examples

- The State Standard the team considered:
 - Students read a wide range of print and non-print texts to build an understanding of texts, of themselves, and of the cultures of the United States and the world; to acquire new information; to respond to the needs and demands of society and the workplace; and for personal fulfillment. Among these texts are fiction and nonfiction, classic and contemporary works. (NCTE)
 - 9th grade: identify characteristics of the literary period or historical setting of a text



Page 8 Part V: Is it Reading/Math?

Is it Square? Is it Plumb?

Martha will make a presentation to the class.

- Is this reading? No. Martha is activating a switch and a communication device which are presented to her one at a time and then withdrawn.
- Does it link to the grade level content standard on identifying characteristics of the literary period or historical setting of a text? No. Although the presentation compares two periods of music for the Beatles, it does not involve a literary text.
- Is it meaningful? Making a presentation using a switch and communication device is something all high school students are expected to do, and is important to work on this skill. Martha does a great job, but it is not reading. It could be a skill targeted for the IEP.




Page 9 Part V: Is it Reading/Math?

Is it Square? Is it Plumb?

Martha will identify 5 words using tactile cues which are symbolic of each word and related to activities in the community and at home.

- Is this reading? Yes. Martha is identifying the tactile cues which are symbolic of the identified terms.
- Does it link to the grade level content standard on identifying characteristics of the literary period or historical setting of a text? No. These are functional words.
- Is it meaningful? This may be an important functional reading goal to retain for the IEP, but keep searching for the goal that will promote learning the grade level standard.



Shopping



Page 10 Part V: Is it Reading/Math?

Is it Square? Is it Plumb?

Martha will review and identify characteristics of a historical setting within the context of a social studies class.

- Is this reading? Yes. Martha is gaining information from the tactile cues symbolic of the characteristics of a historical setting, and demonstrating comprehension by selecting the correct cue.
- Does it link to the grade level content standard on identifying characteristics of the literary period or historical setting of a text? Yes. Martha is reviewing the same terms as all students – characteristics of a historical setting.
- Is it Meaningful? Martha is learning what has been identified as important for all students to know and facilitates opportunities for communication with peers.




Page 11 Part V: Is it Reading/Math?

Jordan is working on interpreting figurative, symbolic, and/or idiomatic (e.g., jargon, dialect) language.

Linking to a State Standard: Examples

- The State Standard the team considered:
 - Students apply knowledge of language structure, language conventions (e.g., spelling and punctuation), media techniques, figurative language, and genre to create, critique, and discuss print and non-print texts. (NCTE)
 - 10th grade:** interpret figurative, symbolic, and/or idiomatic (e.g., jargon, dialect) language



Page 12 Part V: Is it Reading/Math?

Is it Square? Is it Plumb?

- Jordan is working on laundry skills.
 - Is this reading?** No. Jordan is following verbal directions.
 - Does it link to the grade level content standard on interpreting figurative, symbolic, and/or idiomatic (e.g., jargon, dialect) language?** No.
 - Is it meaningful?** This may be an important skill for Jordan to work on so that he can be as independent as possible as he transitions from school and could be addressed through the IEP.



Page 13 Part V: Is it Reading/Math?

Is it Square? Is it Plumb?

- Jordan will identify and explain the meaning of 5 survival signs.
 - Is this reading?** Yes. Jordan is both identifying the words and giving their meaning.
 - Does it link to the grade level content standard on interpreting figurative, symbolic, and/or idiomatic (e.g., jargon, dialect) language?** No. These are functional words.
 - Is it meaningful?** This may be an important functional reading goal to retain for the IEP, but keep searching for the goal that will promote learning the grade level standard.



Page 14 Part V: Is it Reading/Math?

Is it Square? Is it Plumb?

- Jordan will identify/explain idioms from "To Kill a Mocking Bird."
 - Is this reading?** Yes. Jordan is selecting the idiom from a choice of two (answer and one distractor).
 - Does it link to the grade level content standard of interpreting figurative, symbolic, and/or idiomatic (e.g., jargon, dialect) language?** Yes. Jordan is using idioms taken from the "To Kill a Mocking Bird" text.
 - Is it meaningful?** Jordan is increasing his understanding of vocabulary and is being provided a context for peer interaction.



Page 15 Part V: Is it Reading/Math?

Sarah is working on using, interpreting, and analyzing informational text.

Linking to a State Standard: Examples

- The State Standard the team considered:
 - Students are expected to identify, analyze and interpret a variety of genres, relating them to their own experience and knowledge.
 - 8th grade:** students will use, interpret, and analyze informational text (encyclopedias, articles, textbooks and reference sources) to locate information for school or personal use



Page 16 Part V: Is it Reading/Math?

Is it Square? Is it Plumb?

- Sarah will assemble materials according to verbal directions.
 - Is this reading?** No. Sarah is following verbal directions to put materials together.
 - Does it link to the grade level content standard on students will use, interpret, and analyze informational text (encyclopedias, articles, textbooks and reference sources) to locate information for school or personal use.** No. This is a functional task.
 - Is it meaningful?** This may be a skill used at home or possible practice for a work place task and could be developed as Sarah works towards transition to the work place.



Page 17 Part V: Is it Reading/Math?

Is it Square? Is it Plumb?

- Sarah will file food labels by the beginning letter of the product.
 - Is this reading?** Yes. Sarah is reading food labels and filling according to the beginning letter.
 - Does it link to the grade level content standard on students will use, interpret, and analyze informational text (encyclopedias, articles, textbooks and reference sources) to locate information for school or personal use.** No. Sarah is completing an assembly task.
 - Is it meaningful?** Sarah may find this a useful organization skill in her future which can still be addressed in the IEP.



Page 18 Part V: Is it Reading/Math?

Is it Square? Is it Plumb?

- Sarah is reading a biography about JK Rawlings and identifying facts.
 - Is this reading?** Yes. Sarah works with graphics as the biography is read to her and then answers questions.
 - Does it link to the grade level standard content on students will use, interpret, and analyze informational text to locate information for school or personal use.** Yes. Sarah is reading and extracting information from a grade level text.
 - Is it meaningful?** The Harry Potter books and movies are very popular. Extracting information from text is an important skill in all environments.



Page 19 Part V: Is it Reading/Math?

Josh is working on understanding the meaning of equivalent forms of expressions, equations, inequalities, and relations.

Linking to a State Standard: Examples

- The State Standard the team considered:
 - Represent and analyze mathematical situations and structures using algebraic symbols.
 - 9th grade: understand the meaning of equivalent forms of expressions, equations, inequalities, and relations



Page 20 Part V: Is it Reading/Math?

Is it Square? Is it Plumb?

Josh will pour pre-measured ingredients into a mixing bowl.

Is this really math? No. Josh has not participated in measuring.

Does it link to the grade level content standard on understanding the meaning of equivalent forms of expressions, equations, inequalities, and relations? N/A

Is this meaningful? This may be a skill to retain for the IEP in terms of following directions or motor development, but it does not promote understanding of mathematical procedures.




Page 21 Part V: Is it Reading/Math?

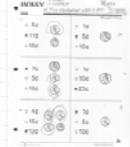
Is it Square? Is it Plumb?

Josh will identify specific coins and match them to the correct amount.

Is this math? Yes. Josh is working on money skills.

Does it link to the grade level content standard on understanding the meaning of equivalent forms of expressions, equations, inequalities, and relations? No. Typically this math skill is taught in the early grades.

Is this meaningful? The IEP team may keep this goal to promote functional independence, but keep searching for a closer link.




Page 22 Part V: Is it Reading/Math?

Is it Square? Is it Plumb?

Josh will use pictures and manipulatives to solve for the variable.

Is this math? Yes. Josh is solving for a variable.

Does it link to the grade level content standard on understanding the meaning of equivalent forms of expressions, equations, inequalities, and relations? No. Josh is not required to look at both sides of the equation.

Is it meaningful? It gives Josh another opportunity to problem solve.




Page 23 Part V: Is it Reading/Math?

Is it Square? Is it Plumb?

Josh uses manipulatives to solve for the variable within the equation.

Is it math? Yes. Josh is working on equations.

Does it link to the grade level content standard on understanding the meaning of equivalent forms of expressions, equations, inequalities, and relations? Yes. Josh is working on linear equations.

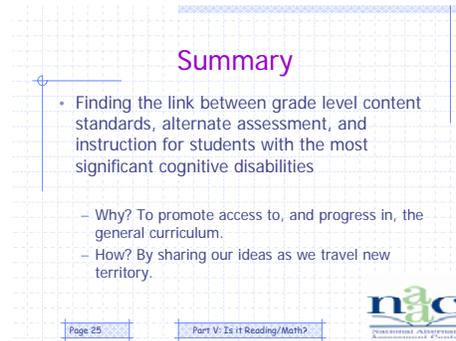
Is it meaningful? Josh is strengthening his basic number sense, in addition to using higher order thinking skills.




Page 24 Part V: Is it Reading/Math?

Summary

After viewing the previous slides on what it looks like to link the instruction of students with the most significant cognitive disabilities to the grade level content standards, it is important to consider that as special educators, we are no longer looking at modifying *what* we teach (a separate curriculum) but *how* we teach the same grade level content standards to all students.



Summary

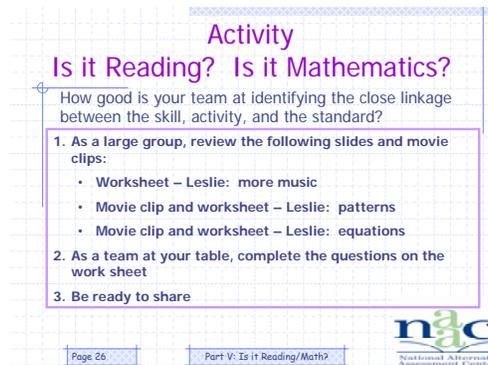
- Finding the link between grade level content standards, alternate assessment, and instruction for students with the most significant cognitive disabilities
 - Why? To promote access to, and progress in, the general curriculum.
 - How? By sharing our ideas as we travel new territory.

Page 25 Part V: Is it Reading/Math?



Activity

The activity is included to allow participants time to reflect and practice what they have learned in the session. Pass out the handouts provided and review the instructions for the activity.



Activity

Is it Reading? Is it Mathematics?

How good is your team at identifying the close linkage between the skill, activity, and the standard?

1. As a large group, review the following slides and movie clips:
 - Worksheet – Leslie: more music
 - Movie clip and worksheet – Leslie: patterns
 - Movie clip and worksheet – Leslie: equations
2. As a team at your table, complete the questions on the work sheet
3. Be ready to share

Page 26 Part V: Is it Reading/Math?



Review slide 27 with the group; then, allow participants to work in small groups to answer the three questions on the slide. Allow time for completion of the worksheet, sharing information, and discussion. Go over slide 28 with participants.

Is it Square? Is it Plumb?

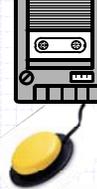
- Leslie will request more music using her head switch.
- *Is it math?*
- *Does it link to the grade level content standard on understand the meaning of equivalent forms of expressions, equations, inequalities, and relations?*
- *Is it meaningful?*




Page 27 Part V: Is it Reading/Math?

Is it Square? Is it Plumb?

- Leslie will request more music using her head switch.
- *Is it math?* No. Leslie is using a switch.
- *Does it link to the grade level content standard on understand the meaning of equivalent forms of expressions, equations, inequalities, and relations?* No.
- *Is it meaningful?* Leslie enjoys playing music and can practice switch use and communication skills.




Page 28 Part V: Is it Reading/Math?

Review slide 29 with the group ensuring that you watch the video clip first. Allow participants to work in small groups to answer the three questions on the slide. Allow time for completion of the worksheet, sharing information, and discussion. Go over slide 30 with participants.

Is it Square? Is it Plumb?

- Leslie will identify the pattern from 3 distractors.
- *Is it math?*
- *Does it link to the grade level content standard on understand the meaning of equivalent forms of expressions, equations, inequalities, and relations?*
- *Is it meaningful?*




Page 29 Part V: Is it Reading/Math?

Is it Square? Is it Plumb?

- Leslie will identify the pattern from 3 distractors.
- *Is it math?* Yes. Identifying patterns is basic to mathematical procedures.
- *Does it link to the grade level content standard on understand the meaning of equivalent forms of expressions, equations, inequalities, and relations?* No. It is necessary to understand basic patterns, but this is covered at a lower grade level.
- *Is it meaningful?* It provides grounding for further understanding.




Page 30 Part V: Is it Reading/Math?

Review slide 31 with the group ensuring that you watch the video clip first. Allow participants to work in small groups to answer the three questions on the slide. Allow time for completion of the worksheet, sharing information, and discussion. Go over slide 32 with participants.

Is it Square? Is it Plumb?

- Leslie will complete a function table using two variables.
- *Is it math?*
- *Does it link to the grade level content standard on understand the meaning of equivalent forms of expressions, equations, inequalities, and relations?*
- *Is it meaningful?*




Page 31 Part V: Is it Reading/Math?

Is it Square? Is it Plumb?

- Leslie will complete a function table using two variables.
- *Is it math?* Yes. Leslie is working with linear equations.
- *Does it link to the grade level content standard on understand the meaning of equivalent forms of expressions, equations, inequalities, and relations?* Yes. Leslie works with variables to complete a function table.
- *Is it meaningful?* It provides grounding for further understanding.




Page 32 Part V: Is it Reading/Math?

Checkpoint



Checkpoint

- How close to the grade-level standard are the targets in your state's alternate assessment?
- What do you need to do to create a variety of links to the grade level content standards?

Page 33

Part V: Is it Reading/Math?



Notes