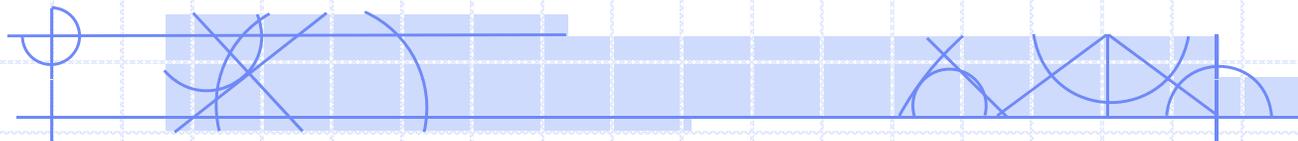


Linking to Content Standards: Selecting Assessment Content



Is it Reading? Is it Mathematics?
**NSW Special Education
Conference**
June 16, 2005

Outcomes for Part

- **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**

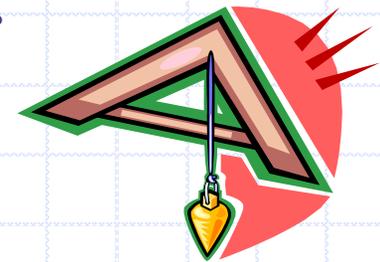
What are the dimensions?

Grade Level Curriculum Instruction with
Expectations for Content Area Learning

Is it "Square" and is it "Plumb"...?

A close look at what is taught ...

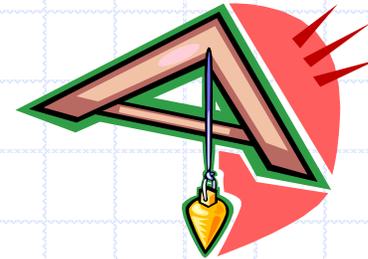
- Is it really academic content?
- Does it access the grade level content standard?
- Is it meaningful?



What are the dimensions?

Grade Level Curriculum Instruction with Expectations for Content Area Learning

Not "Plumb"...

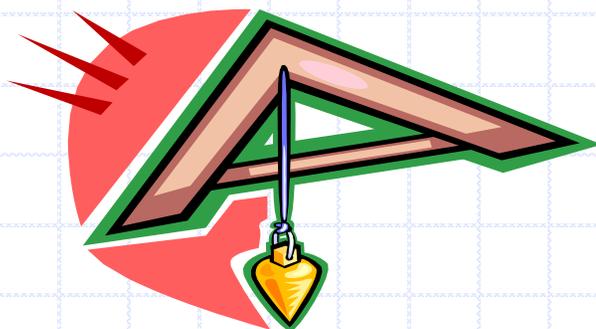


- Curriculum involvement with lower grade level standards
- Curriculum involvement with no expectations to learn
- Content involvement with no curriculum connection
- Student performance in a separate curriculum

Grade Level Curriculum + Expectations = Linkage

Students with significant cognitive disabilities:

- receive instruction on grade level 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



Some Words about "Functionality"

Students with 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)

Student Vignette: Victoria

- Is a student with a significant cognitive disability
- Is nonverbal with emerging skills in communication and uses a wheelchair for mobility
- Has limited use of her upper extremities and utilizes assistive technology to demonstrate learning

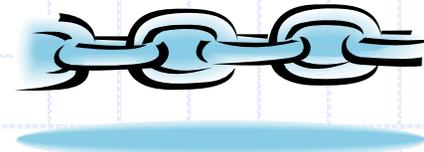


Content Area - Reading

- Standard: Students will use a variety of strategies to understand what they read.
- **8th Grade Level Standard:** *Make predictions, draw conclusions, and make generalizations about what is read.*
- Curriculum materials: *Roll of Thunder, Hear My Cry* by Mildred Dial Taylor

Grade Level Curriculum + Expectations

= Link



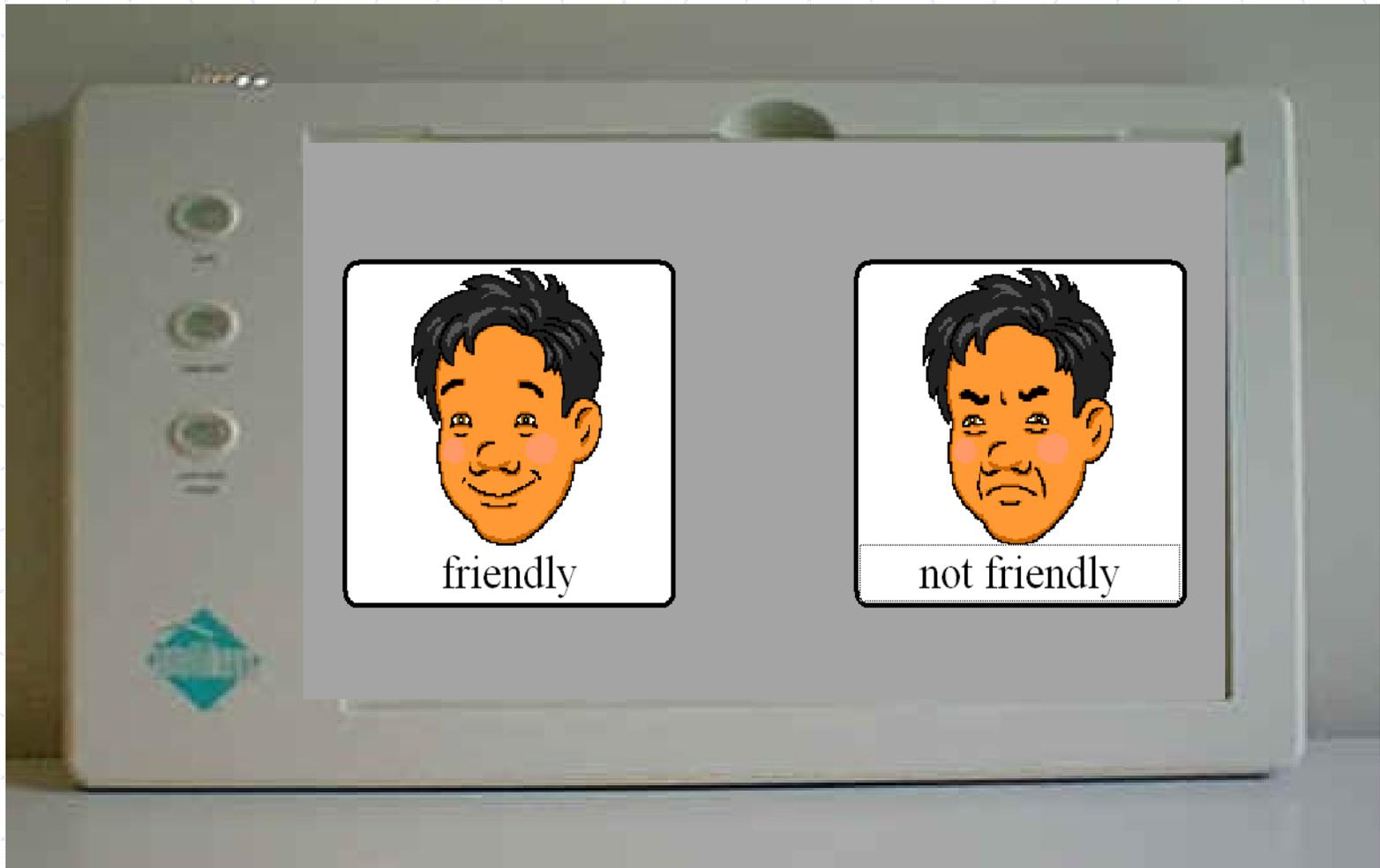
- Victoria is provided with a prerecorded summary of each chapter so that she can listen when she activates a tape recorder with a switch
- She then uses a custom overlay on an adapted keyboard to *predict* whether a described character will be friendly with the Logan children and after reading the selection will match the character to the correct interaction
- She will be given picture choices to *draw conclusions* about underlying cause(s) of the family's difficulties

Excerpt of the summary that Victoria listens to and a picture of her switch:

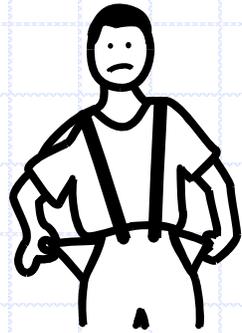
- Cassie Logan had 3 brothers, Stacey, Christopher John, and Little Man. They live on a big 400 acre farm. Their family still owes money and have to pay taxes. Their papa leaves home each year to find work to pay for the farm...



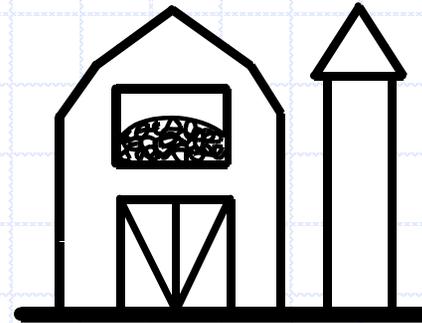
Overlay and adapted keyboard Victoria uses to predict and check predictions:



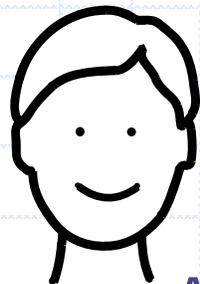
Pictures for Victoria to choose from that represent her opinion of why the Logan family was having a hard time.



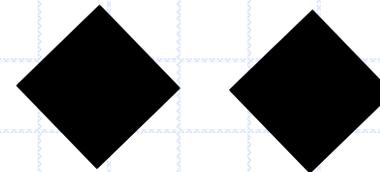
They were poor.



They lived on a farm.



They were African-American.



They wanted to be treated the same.

Curriculum involvement + lower grade level standard



When provided with pictures from *Roll of Thunder, Hear My Cry*, she identifies :

1. the characters, or
2. whether person or thing, or
3. initial letter sound of prioritized words

Content Involvement + No Curriculum Connection



- Victoria answers questions on magazine article about country western singers while the other students are making predictions and drawing conclusions about the first chapter of *Roll of Thunder, Hear My Cry*
- Victoria turns the pages in a magazine to work on fine motor skills

Student Performance + Separate Curriculum



- Victoria activates a switch to listen to “more developmentally appropriate” pre-k book
- She reads functional signs and grocery lists (functional)
- Victoria follows a work sequence to complete a task at a job site

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*

Finding the Close Link

- Martha will use her AAC device to tell the social studies class when to start and stop the reenactment of the war?
 - *Is this really reading? No.*
 - *Is it on grade level? No.*
 - *Using an AAC device may be an important communication skill for the IEP and can be taught within classroom instruction.*



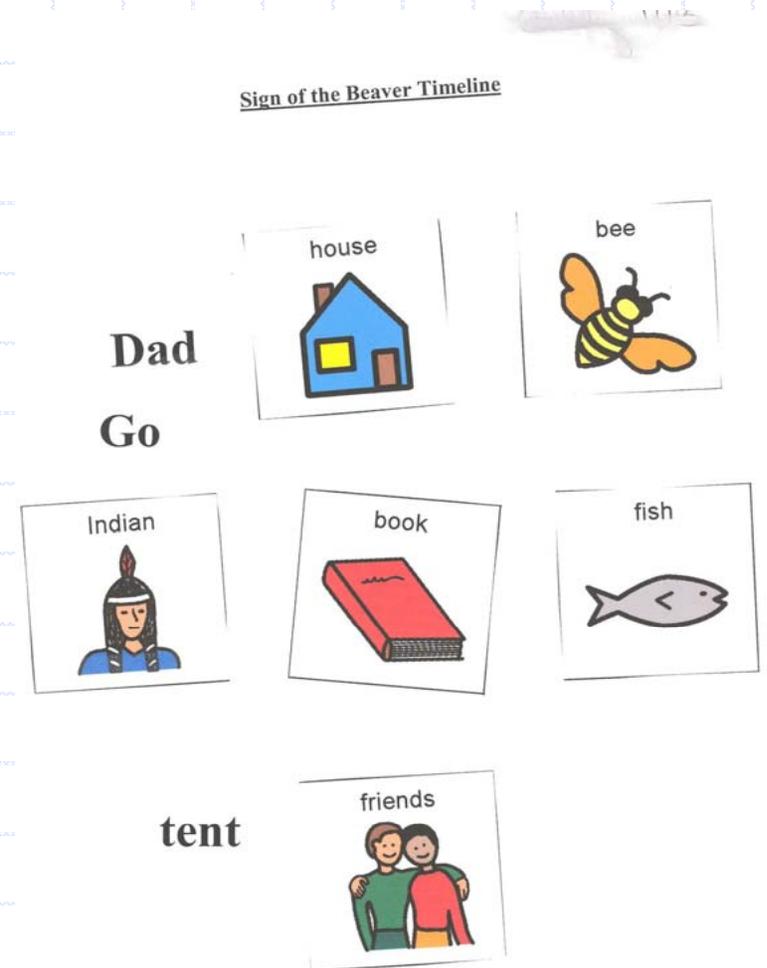
Finding the Close Link

- Martha will acquire 20 sight words related to activities in the community and at home
 - *Is this really reading? Yes.*
 - *Does it link to the 9th grade standard on **identifying characteristics of the literary period or historical setting of a text** ? No.*
 - *This may be an important functional reading goal to retain for the IEP, but keep searching for the goal that will promote learning the state standard.*

Finding the Close Link

Martha will create a journal summarizing what she has read from an adapted text.

- *Is this reading? This goal promotes Martha's progress towards comprehension literacy.*
- *Does it link to the 9th grade curriculum?*
 - *No, typically this reading material is used in earlier grades.*
- *The IEP team may keep this goal to promote literacy, but keep searching for a closer*



Finding the Close Link

- Martha will use pictures to identify main ideas and historical context of a diary of an Irish immigrant.
 - *Is this reading? She is building literacy by associating pictures with symbols.*
 - *Does it align with the state standard? Yes. It gives Martha a way to begin to locate and analyze elements of historical setting in non fiction text.*
 - *Is it meaningful? Yes. It gives Martha a way to discuss stories and could be applied to autobiographical sequences as well.*

Journal of _____

Journal entry one: _____ **11/21/02**

 My name is _____ **Shawn O'Riley**

 I live in a small _____ **village**

 _____ had a potato famine. **Ireland**

 My _____ will move to America. **family**

 We will take a _____ to America. **ship**

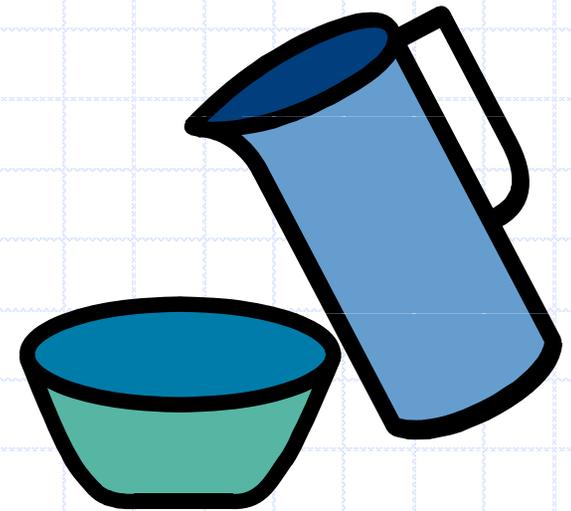
Initial draft
2/5 = 40%

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;***

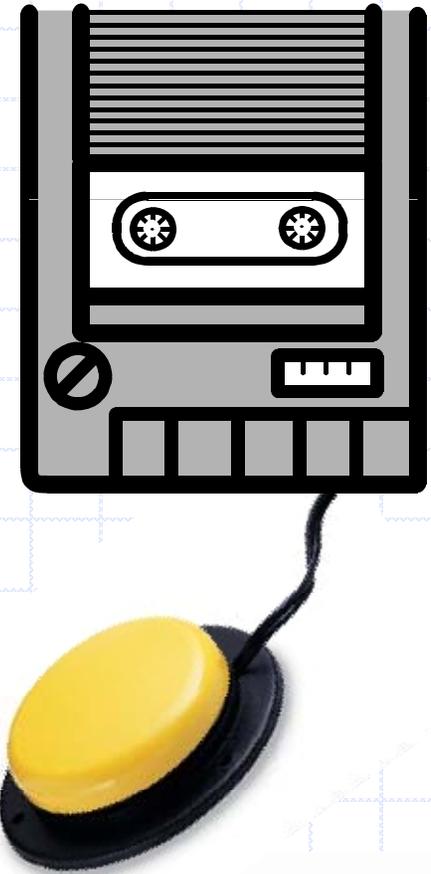
Is it Square? Is it Plumb?

- 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 9th grade content standard on understanding the meaning of equivalent forms of expressions, equations, inequalities, and relations? No.*
 - *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.*



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 of understand the meaning of equivalent forms of expressions, equations, inequalities, and relations?* No.
 - *Is it meaningful?* Yes. Leslie enjoys playing music and can practice switch use.



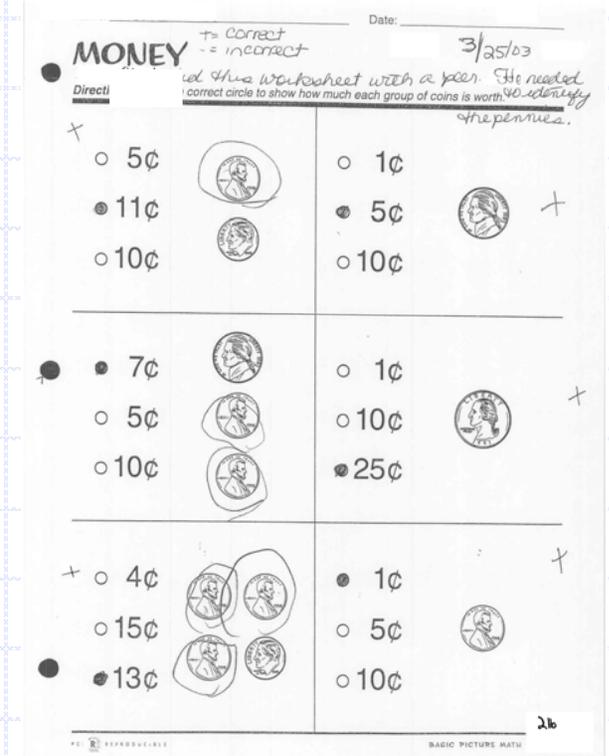
Is it Square? Is it Plumb?

- 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?* Yes. It provides grounding for further understanding.



Is it Square? Is it Plumb?

- Josh will identify specific coins and match them to the correct amount.
 - **Is this math?** Yes. This goal promotes Jordan's progress towards independence.
 - **Does it link to the 9th grade 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.



Finding the Close Link

- Jordan will count to 10 related to activities in the community and at home
 - *Is this really math? Yes.*
 - *Does it link to the 9th grade standard on mathematical situations and structures using algebraic symbols? No*
 - *This may be an important functional math goal to retain for the IEP, but keep searching for the goal that will promote learning the state standard.*

DEC 1 2 2002

I helped _____ count Boxtops. We had 12 boxtops today.

Hannah



Finding the Close Link

- Jordan will use pictures and manipulatives to solve for the variable.
 - *Is this math? He is solving for a variable.*
 - *Does it link to the state standard? Yes. It gives Jordan a way to begin to define the missing element in each equation.*
 - *Is it aligned to the standard? No, he is not required to look at both sides of the equation.*
 - *Is it meaningful? Yes. It gives Jordan another opportunity to problem solve.*

$8 + 2 = a$ $a = 10$

$9 + 1 = z$ $z = 10$

$4 + 5 = n$ $n = 9$

$7 + 2 = p$ $p = 9$

$3 + 4 = s$ $s = 7$

$2 + 8 = a$ $a = 10$

$6 + 3 = n$ $n = 9$

$5 + 1 = p$ $p = 5$

$4 + 2 = s$ $s = 6$

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?*** Yes. Josh is strengthening his basic number sense, in addition to using higher order thinking skills.



Finding the close link

- Jordan uses manipulatives to solve for the variable within the equation.
 - Is it math? Yes
 - Does it link to the state standard? Yes
 - Is it aligned? Yes
 - Is it meaningful? Yes



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*

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 9th grade 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. Martha does a great job, but it is not reading. It could be a skill targeted for the IEP.



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 9th grade 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

Is it Square? Is it Plumb?

- Martha will review and identify characteristics of a historical setting.
 - ***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 9th grade 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?*** Yes. Martha is learning what has been identified as important for all students to know and facilitates opportunities for communication with peers.

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*

Is it Square? Is it Plumb?

- Jordan is working on laundry skills.
 - ***Is this reading?*** No. Jordan is following directions.
 - ***Does it link to the 9th grade 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 though the IEP.

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 9th grade 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.

Is it Square? Is it Plumb?

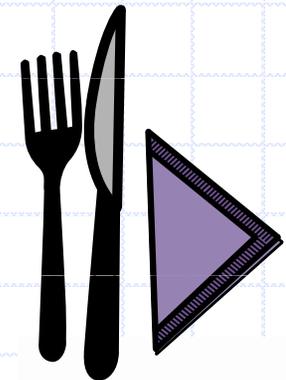
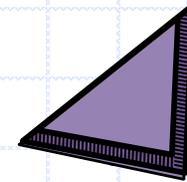
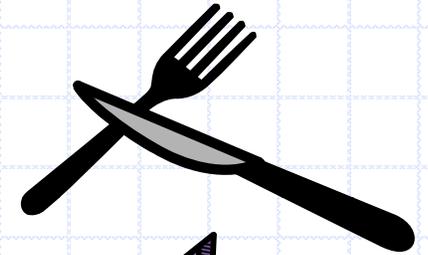
- Jordan will identify/explain idioms from “To Kill a Mocking Bird.”
 - *Is this reading? Yes. Jordan is selecting the idiom from one distractor.*
 - *Does it link to the grade level content standard of interpreting figurative, symbolic, and/or idiomatic (e.g., jargon, dialect) language? Yes. Jordan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

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.
 - ***10th grade:*** *students will use, interpret, and analyze expository text (encyclopedias, articles, textbooks and reference sources) to locate information for school or personal use*

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 expository 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.



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 filing according to the beginning letter.
 - ***Does it link to the grade level content standard on*** students will use, interpret, and analyze expository text (encyclopedias, articles, textbooks and reference sources) to locate information for school or personal use. No. This is a functional task.
 - ***Is it meaningful?*** Sarah may find this a useful organization skill in her future which can still be addressed in the IEP.

Sarah is a 13 year old girl with Down Syndrome and a severe cognitive disability.

Is it Square? Is it Plumb?

- Sarah is reading the biography of 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?* Yes. The Harry Potter books and movies are very popular. Extracting information from text is an important skill in all environments.



Summary

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

References

- NCTE, National Council for Teachers of English. Standards for the English Language Arts. Available on line, <http://www.ncte.org/about/over/standards/110846.htm>
- Colorado Enhanced Assessment Grant (CEAG). Reading Biographies and Expository Writing. Whose Life Is It Anyway? Sample adaptation of Biography Fact Chart (using Boardmaker by Mayer-Johnson), pg 19.
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- EAG ? Multimedia Glossary, Science, Math and Language Arts. Developed with Classroom Suite, IntelliTools, Inc.