

New Tools for Assessing Spoken and Written Language: Implications for Knowing What to Do Next

MSHA
 March 23, 2012
 Nickola W. Nelson, Ph.D., CCC-SLP
 Michele A. Anderson, Ph.D., CCC-SLP
 Barbara M. Howes, Ph.D., MSW

Acknowledgments/Disclosure

Graduate Student Thesis Research Conducted by:
 Sally Andersen
 Michelle DeMaagd-Slager
 Joyce Irvine
 Michelle Magalski

Nelson, N. W., Plante, E., Brennan, A., Andersen, M. A., & Johnson, B. (2005). *Anatomy of a Test: Why Knowing about Test Construction Matters*. Miniseminar presentation at the annual conference of the American Speech-Language-Hearing Association.

Hotz, G., Nelson, N. W., Plante, E., & Helm-Estabrooks, N., (2007). *Pediatric Traumatic Brain Injury Neurocognitive and Language Assessment*. Miniseminar presentation at the annual conference of the American Speech-Language-Hearing Association, Boston, MA.

Nelson, N. W., Helm-Estabrooks, N., Hotz, G., & Plante, E. (2011). *Test of Integrated Language and Literacy Skills (TILLS; standardization version 2)*. Baltimore, MD: Paul H. Brookes Publishing, Inc.

U.S. Department of Education, Office of Special Education Programs, and Institute of Education Sciences, National Center for Special Education Research for TILLS research.

And support from: Paul H. Brookes Publishing Co., Inc.
michele.a.anderson@wmich.edu



Session Overview

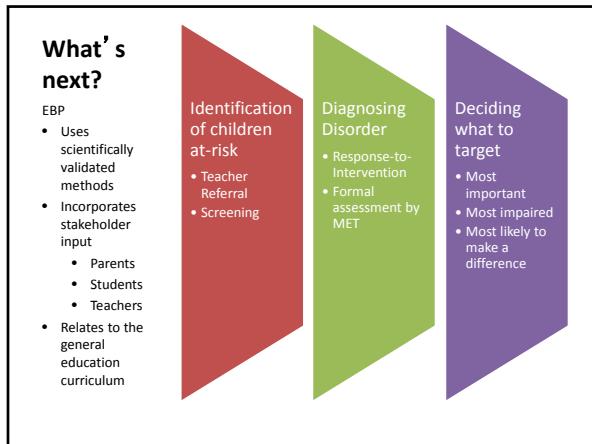
- Background for why we need new tools
 - What things do you want to assess?
 - How do you want to assess them?
 - How do we make the decisions we make?
 - How do we know what to do next?
- Introduce TILLS
- Introduce SRS
- Case studies
- Take home messages

Practice Goals

1. To use EBP identify students who will need the support of S-L services to gain full access to the academic curriculum and social participation.
2. To provide evidence-based intervention services that will maximize the probability of students' success.

Focus on Diagnostic Tools
 What purpose?

Focus on Diagnostic Tools
 What constructs?



- What integrated language/literacy skills do school-age students need?**
- Comprehend literate language; follow complex directions
 - Express complex meanings: higher level syntax, semantics, figurative meanings, discourse organization
 - Read and understand: decode + comprehend
 - Formulate and write: organize discourse + formulate sentences + spell words
 - Interact with peers in socially appropriate ways
 - Regulate attention and allocate cognitive-linguistic resources strategically

What's next?

- INDIVIDUALIZED ASSESSMENT FOR LANGUAGE AND LITERACY DISORDERS**
-
- ❑ Assess sound/word & sentence/discourse abilities across spoken & written modalities
 - ❑ Could administer multiple tests of oral and written language (e.g., CELF4, GORT, TOWL, TNL, WRMT)
 - ❑ Need normative data based on common standardization group
 - ❑ Current options with common standardization group: WJIII, OWLS, ITPA
 - ❑ Need to be able to interpret findings (sensible theoretical model)
 - ❑ Seek corroboration from multiple sources
 - ❑ Ethnographic interviews; unstandardized tools
 - ❑ A few evidence-based checklists (ORS with CELF-4, Bishop's CCC)
 - ❑ Add qualitative information from non-standardized contextualized measures
 - ❑ Curriculum-based language assessment and intervention (Nelson, 1989; 2010)
 - ❑ QRI-5 (Leslie & Caldwell, 2011)

New Tools

Test of Integrated Language and Literacy Skills (TILLS) Nickola W. Nelson, Nancy Helm-Estabrooks, Gillian Hotz, & Elena Plante

TILLS Student Rating Scales (2011).
Nickola W. Nelson, Barbara M. Howes, Michele A. Anderson,

Reflecting on Decision-Making Processes

Example of Speech-Language Intervention
SLI_0001.wmv

<http://www.youtube.com/watch?v=64HgRfBDQhw>

Reflections

- On what basis were decisions made in this case about what to do next?
- What would you do differently?
- What informal processes might inform decision making?
- What formal tools might inform decision making?

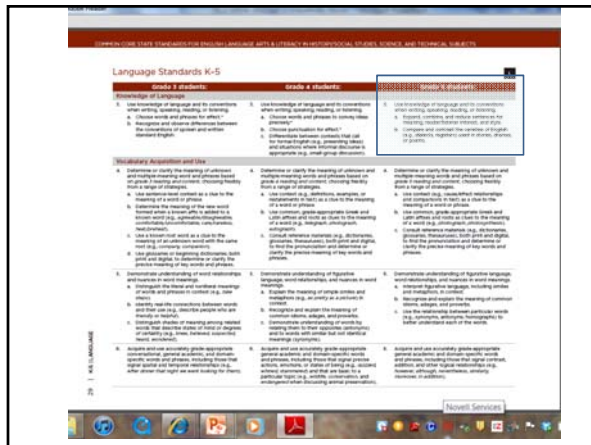
Example of 5th Grade Text

(p. 64, CCSS, Appendix B)

Farley, Walter. *The Black Stallion*. New York: Random House Books for Young Readers, 2008. (1941)
From Chapter 1: "Homeward Bound"

The tramp steamer *Drake* plowed away from the coast of India and pushed its blunt prow into the Arabian Sea, homeward bound. Slowly it made its way west toward the Gulf of Aden. Its hold was loaded with coffee, rice, tea, oil seeds and jute. Black smoke poured from its one stack, darkening the hot cloudless sky.

Alexander Ramsay, Jr., known to his friends back home in New York City as Alec, leaned over the rail and watched the water slide away from the sides of the boat. His red hair blazed redder than ever in the hot sun, his tanned elbows rested heavily on the rail as he turned his freckled face back toward the fast-disappearing shore.



3. Use knowledge of language and its conventions when writing, speaking, reading, or listening.

- Expand, combine, and reduce sentences for meaning, reader/listener interest, and style.
- Compare and contrast the varieties of English (e.g., dialects, registers) used in stories, dramas, or poems.

Language is Reciprocal and Interactive Across Modalities

- Thinking
- Writing
- Reading
- Speaking
- Listening

Comprehension
(sentence/discourse level)

- Ideas/message/intention
- Analyze sentences & relations

Decoding
(sound/word level)

- Recognize as meaningful
- Analyze (print/spelling &) phonology

Listening
Reading

Speaking
Writing

Formulation
(sentence/discourse level)

- Ideas/message/intention
- Synthesize sentences

Transcription
(sound/word/letter level)

- Synthesize words
- Represent in print
Spelling → handwriting

What else influences a school-age student's communicative functioning?

A "Simple Model" of Reading

- Reading decoding
 - Sound/word level knowledge
 - Graphophonemic & orthographic knowledge
 - Focus on form
- Reading comprehension
 - Sentence/discourse level knowledge
 - Syntactic & macrostructure knowledge
 - Focus on making sense

Gough, P. B., & Tunmer, W. (1986). Decoding, reading, and reading disability. *Remedial and Special Education, 7*, 6-10.

"Simple model" of language-learning disabilities—with two dimensions

Bishop, D. V. M., & Snowling, M. J. (2004). Developmental dyslexia and specific language impairment: Same or different? *Psychological Bulletin, 130*, 858-886.
 Catts, H. W., & Kamhi, A. G. (Eds.). (2005). *The connections between language and reading disabilities*. Mahwah, NJ: Erlbaum.
 Nelson (2010). *Language and Literacy Disorders: Infancy through Adolescence*. Boston, MA: Allyn & Bacon.

Assessment and Intervention Framework — Language Levels by Modalities

- Sound/word level
 - Phonological awareness
 - Vocabulary knowledge
 - Sound/word perception
 - Word learning
 - Word production
 - Reading decoding
 - Word attack ("sounding out")
 - Fluent word reading (the "direct route")
 - Spelling
 - Phonological/alphabetic strategies
 - Analogical/orthographic strategies
- Sentence/discourse level
 - Sentence/discourse comprehension
 - Spoken
 - Written
 - Sentence/discourse formulation
 - Spoken
 - Written

	Sound/Word Level Pronouncing Decoding Spelling	Sentence/ Discourse Level Comprehension Formulation Narrative Expository	Social Skills Play Nonverbal Theory of Mind Pragmatics
Typical Language	Normal	Normal	Normal
Language Imp. (SLI or NLI)	Below	Below	Normal
Comprehension Deficit	Normal	Below	Normal
Pragmatic Language Imp.	Normal	Below	Below
Dyslexia/ Dysgraphia	Below	Normal	Normal
Autism Spectrum Disorder	Normal	Narrative low	Below
		Expository high	

Evidence for relationships shifting over time

Second grade:
 32% with dyslexia
 36% with mixed RD
 16% with specific comprehension deficit
 15% with nonspecified RD.

Fourth grade:
 22% with dyslexia
 33% with mixed RD
 31% with specific comprehension deficit
 14% with nonspecified RD.

Eighth grade:
 13% with dyslexia
 33% with mixed RD
 30% with specific comprehension deficit
 24% with nonspecified RD.

From longitudinal analysis of Epi-SLI group; Catts, Hogan, & Adlof (2005)

**UNIVERSITY OF WASHINGTON
MULTIDISCIPLINARY LEARNING DISABILITIES
CENTER**

Virginia W. Berninger and colleagues
Family genetics studies of dyslexia & dysgraphia
Exclusion criteria—Normal range on:

- 1) Cognition and memory
- 2) Social emotional
- 3) Attention and executive functions
- 4) Sensory and motor
- 5) Oral language

Berninger, V., & Richards, T. (2010). Inter-relationships among behavioral markers, genes, brain, and treatment in dyslexia and dysgraphia. *Future Neurology*, 5, 597-617. (doi: 10.2217/fnl.10.22)

Dyslexia

Learning Profile	Phenotype Profile
<ul style="list-style-type: none"> First signs in Kdg or 1st grade—naming letters and associating sounds with them (cross-code integration) No preschool history of problems in oral language milestones or primary oral language disability Impaired accuracy and/or rate in lists or passage context <ul style="list-style-type: none"> – word decoding (pseudowords) – word reading (real words), and/or – word spelling (dictation and composing) 	<ul style="list-style-type: none"> Impaired phonological coding (storing spoken words in working memory and analyzing the sounds in them) Impaired orthographic coding (storing written words in working memory and analyzing the letters in them) Impaired phonological loop for integrating letters or words viewed through eyes and internally accessed phonological codes for oral naming through mouth Impaired orthographic loop (internal codes for letters and written words, finger sequencing plans, and integration of those orthographic codes with finger movements for letter and word production)

From: Silliman, E. R., & Berninger, V. W. (2011). Cross-disciplinary dialogue about the nature of oral and written language problems in the context of developmental, academic, and phenotypic profiles. *Topics in Language Disorders*, 31(1), 6-23.

Dysgraphia

Learning Profile	Phenotype Profile
<ul style="list-style-type: none"> First signs in Kdg or 1st grade Impaired handwriting (primary feature)—legibility of letter formation and/or automaticity of retrieval of ordered letters from memory and production of letter forms with a model (copy) or from memory Impaired spelling (with or without handwriting impairment) even when copying Impaired spelling without impaired word reading (incidence 1% to 4%) Impaired handwriting or spelling can interfere with written composition or work completion 	<ul style="list-style-type: none"> Impaired receptive and/or expressive orthographic coding (storing and processing written words in working memory and analyzing the letters in them) Impaired sequential finger movements Impaired orthographic loop (internal codes for letters and written words, finger sequencing plans, and integration of those orthographic codes with finger movements for letter and word production)

From: Silliman, E. R., & Berninger, V. W. (2011). Cross-disciplinary dialogue about the nature of oral and written language problems in the context of developmental, academic, and phenotypic profiles. *Topics in Language Disorders*, 31(1), 6-23.

Oral and Written LLD

Developmental Profile	Learning Profile	PHENOTYPE PROFILE
<ul style="list-style-type: none"> Preschool history of oral language struggles or delay Persisting oral and written language problems in school years All developmental domains in normal range but specific language impairment (SLI) or language learning disability (LLD) occurs in which one or more but not all language skills are impaired, for example, word retrieval, morphology, syntax, making inferences, and/or understanding presuppositions 	<ul style="list-style-type: none"> Impaired reading comprehension—at word level (vocabulary), sentence level (sentence comprehension), and/or text level (factual and inferential questions) following oral and/or silent reading during the school years. Impaired syntax or other aspects of language affect written composition Plus same impairments as in learning profile for dyslexia may occur 	<p>Impaired morphological coding (storing and processing word parts in spoken or written words—bases, prefixes, inflectional suffixes, derivational suffixes)</p> <p>Impaired syntax coding (storing and processing language-specific word order)</p> <p>Impaired word retrieval (e.g. word finding or verbal fluency)</p> <p>Impaired listening comprehension (especially on inferential questions) and/or memory (sentences or text)</p> <p>Same impairments as profile for dyslexia may occur</p>

From: Silliman, E. R., & Berninger, V. W. (2011). Cross-disciplinary dialogue about the nature of oral and written language problems in the context of developmental, academic, and phenotypic profiles. *Topics in Language Disorders*, 31(1), 6-23.

Building New Tools

Michele.

Building TILLS

- **Step 1:** Clarify purpose/construct/test model
- **Step 2:** Generate an item pool
- **Step 3:** Try out, evaluate, & revise
- **Step 4:** Evaluate for main purposes (diagnosing disorder; informing intervention)—“beta trial”
- **Step 5:** Standardize

Step 1. Clarify purpose – TILLS

Does this child (6 through 18 years) have a disorder?
 Does this child have a particular *type* of a disorder?

- Norm referenced
- Differentiates accurately :
 - On the basis of disorder, *not* cultural-linguistic difference
 - *Sensitive* to all levels of disorder
 - *Specific* to those who actually have a disorder
- Ecological validity—relevant to natural contexts
- Fun/interesting for examiners & examinees
- Take no more time than necessary to reach a valid conclusion (60 minutes)

Secondary Purpose

- To know what to do next
 - Predict curriculum-related needs, strengths across all modalities and language levels
 - Guide prioritization of goal areas
 - Inform other decisions (e.g., test accommodations)
 - What to target when students do not show adequate “Response to Intervention” in RTI programs

**TILLS
Structural Model**

Test of Integrated Language & Literacy Skills (TILLS)

(Standardization Version 2; 2011)

Modality	Language Level	
	Sound/Word Level	Sentence/Discourse Level
Listening	1. Vocabulary awareness 2. Phonemic awareness	6. Listening comprehension 8. Following directions
Speaking	4. Nonword repetition	3. Story retelling 13. Social communication
Reading	10. Nonword reading 11. Reading fluency	7. Reading comprehension
Writing	5. Nonword spelling	12. Written expression
Memory	14. Digits forward 15. Digits backward	9. Delayed story retelling

Nelson, N. W., Helm-Estabrooks, N., Hotz, G., & Plante, E. (developed with support of Brookes Publishing and a grant from the U.S. Dept of Ed, IES)
nickola.nelson@wmich.edu or michele.a.anderson@wmich.edu

Step 2. Generate item pool.

- Examples of curricular language; social-interaction language
- Tables of specifications, such as:
 - Complex sentences
 - Developmental expectations
 - Discourse macrostructure
 - Single → double meaning vocabulary words

Step 3: Try out, evaluate, revise

- **Tryout 1.** (n = 50)
 - Trim subtests that don't work
- **Tryout 2.** (n = 150)
 - Tryout scoring; remove items
- **Tryout 3.** (n = 34, LD & TD high school)
 - Expert consultation and pilot of Acting a Scene
 - Evidence to differentiate disorder & scoring reliability
- **Tryout 4.** (n = 513, national sample)
 - Large scale pilot
 - IRT and DIF analyses
- **Tryout 5.** (n = 219 Michigan)
 - FILA Study “Formal & Informal Language Assessment”
 - Tests added to increase construct & content validity
- **Beta Trial** (n = 118, national sample; TL & LLD)
 - Sensitivity / specificity
 - Item Response Theory (IRT) analysis

1. Vocabulary Awareness

- "Here are three words. Let's read them together."
- "dog-cat-bone"
- Say, "Tell me two words that go together."
- Then ask, "Why?"

SUBTEST 1
Practice Item

dog

cat

bone

Practice Items	
dog-cat-bone Both animals / pets (not dogs chase cats [not core meaning])	dog-cat-bone Dogs like / eat / chew / bury bones
light-sun-feather Sun gives light / both bright	light-sun-feather Feather is light / not heavy

2. Phonemic Awareness

- Say, "I am going to say a pretend word that is not a real word. Your job is to say the word back to me, but without the first sound. Let's practice."
- "If the word is bip, and we take away the first sound, the word becomes [hesitate]... ip." "If the word is stig, and we take away the first sound, the word becomes... tig."

Practice Items		
Item	Phonetic spelling	Spoken response
bip → ip	/bɪp/ → /ɪp/	
stig → tig	/stɪg/ → /tɪg/	

3. Story Retelling

Select the age-appropriate story and say, "I'm going to read you a story. Listen carefully. Your job is to tell the story back to me just like I tell it to you. I can only read it once. Are you ready? Okay, here is the story." (Read the age-appropriate story, starting with its title, with a natural rate and tone.)

STORY SA: "TOMMY THE THROCKY" (FOR STUDENTS AGED 8-10.5-11.5)

"Tommy is another throcky he was getting for them eating on lunch last year. He also had the throcky with that and several others. They were just these things. All the throckies. But Tommy was a real throcky. He could be throcked for throckies that couldn't be throcked. Then he made the first and some for their throckies. He never didn't know why Tommy kept getting throcked when all the throckies were throcky. And."

Say: "We will tell the same story. Start now."

Probe: If the student does not initiate the story, say: "What was the story about? What happened?"

Content units	Items	Content units	Items
1. Tommy's throcky (proper name to count)	1	17. Ask a "throcky" (figurative meaning)	1
2. Another	1	18. All throcky	1
3. Throcky he (throcky)	1	19. He throcked (asked them into, told)	1
4. He was getting that throcky (getting weight)	1	20. He throcked	1
5. Throcky eating	1	21. That throckies	1
6. Throcky throcky	1	22. Ask him	1
7. Throcky throcky	1	23. He throcked	1
8. He was	1	24. Then he throcked	1
9. Another	1	25. He throcked	1
10. Was throcky	1	26. Another	1
11. That throcky throcky (only scores once)	1	27. Another	1
12. Another throcky (throcky throcky)	1	28. He throcked	1
13. He was just	1	29. Ask him why	1
14. Another throcky	1	30. Tommy throcky	1
15. In the throcky	1	31. Keep getting weight (getting bigger/fatter)	1
16. That throcky throcky	1	32. When all the throcky throckies	1
		33. Ask throcky throcky	1

4. Nonword Repetition

Say, "I am going to play a voice recording for you. The person on the recording will say a pretend word that is not a real word. You will only hear the word once. Listen carefully so you can say the word just like the person you hear." Start the CD.

Subtest 4		
Stimulus word	Actual/target spoken response	Imitation Score
1. tep	/tɛp/	/1
2. gid	/gɪd/	/1
22. dop i ni' cian	/dɒpɪniʃən/	/1
23. pro der o' pi a	/prɒdɹɒpiə/	/1
24. stren o' pi ous	/stɹɛnɒpiəs/	/1

5. Nonword Spelling

Say, "I am going to play a voice recording for you. The person on the recording will say a pretend word that is not a real word. You will only hear the word once. Listen carefully so you can say the word just like the person you hear." Start the CD.

Subtest 5		
	Child's written response	Spelling Score
1.	t e p	/1
2.	g i d	/1
22.	d o p i n i c i a n a s i o n	/1
23.	p r o d e r o p i a	/1
24.	s t r e n o p i o u s i n l a s i u s	/1

6. Listening Comprehension

Say, "I'm going to read some very short stories. Your job is to listen and pay careful attention. Then I'll ask you some questions about the story. Tell me 'yes' if you are sure the answer is 'yes.' Tell me 'no' if you are sure the answer is 'no.' If the story doesn't clearly tell you the answer, tell me 'maybe.'"

6. The land beyond the mountains was divided into two new territories. Each was to have its own governor, who would be selected by the President following consultation with his advisors.			
a. Was a different governor going to be appointed for each new territory?	(Y) N M	0	1
b. Were the mountains part of the new territories?	Y (N) M	0	1
c. Was the President in charge of choosing the new governors?	(Y) N M	0	1

7. Reading Comprehension

Say, "Now, it's your turn to read some short stories and answer the questions in your Student Book. Circle yes if you are certain the answer is yes. Circle no if you are certain the answer is no. If the story doesn't clearly tell you the answer, circle maybe. Hold the blank card under each line as you read it. You can read silently or out loud, whichever is easier for you.

6.	"What I Did on My Summer Vacation" is the topic the teacher makes her class write about the first day of school every year. When school started a month ago, the teacher gave her usual first writing assignment.			
a.	Was "The Middle East" the first writing assignment?	Yes	No	Maybe
b.	Did all of the students take a trip on their summer vacation?	Yes	No	Maybe
c.	Did the teacher ask her class to write about their summer vacations?	Yes	No	Maybe

8. Following Directions

Cover up the first practice item in the Student Book with the card stock. Say, "I'm going to give you some directions to follow with your pencil in your Student Book. Listen carefully because I can only say them once. When I say 'Go,' move the card and use your pencil to follow the directions."

Instructions	Student's response (from Student Book)	Score
Number 1: Draw a circle around the heart. Go.		0 1
Number 2: Draw a line above the tree and circle the lock. Go.		0 1
Number 19: Cross out the target number and draw a line from the lowercase e to the S over the 20. Go.	E 88 e 20 S 16	0 1
Number 20: If there is an arrow pointing down, draw a circle under the moon. If not, circle the star.		0 1

9. Delayed Story Retelling

Turn to the age-appropriate story and say, "Remember the story [Tommy the Trickster/The Rubber Raft]? Tell me the story again. Try to remember as much as you can. Start now."

STORY 24: "TOMMY THE TRICKSTER" (FOR STUDENTS AGES 6-10/11)

Tommy's mother thought he was getting fat from eating too much junk food. So, she started the refrigerator with fruit and cereal only. She was all about being on the healthy side. Tommy never liked either. He thought he was being teased because their families were kind for them. They had made the fruit and cereal for their parents. He really didn't know why Tommy kept getting weight when all she had given him was healthy.

26. "How did the story end?"

26a. "How did the story end?"

26b. "How did the story end?"

Content units	Score	Content units	Score
1. Tommy's mom ate proper meals to count	1	11. eat a "fat" label (figurative meaning)	1
2. mother	1	12. all school	1
3. thought he (Tommy)	1	13. he continued teased them into, last	1
4. he was getting fat (pogger, getting weight)	1	14. the mother	1
5. fruit eating	1	15. that couldn't	1
6. too much	1	16. were last	1
7. junk food	1	17. to do	1
8. in spite	1	18. that he teased	1
9. started	1	19. the fruit	1
10. the refrigerator	1	20. couldn't	1
11. had healthy foods (only scores once)	1	21. Tommy (he)	1
12. could (didn't) healthy foods	1	22. the school	1
13. one was just	1	23. didn't know why	1
14. in the refrigerator	1	24. when all the had given him	1
15. but Tommy (he)	1	25. when all the had given him	1
		26. were healthy food	1

10. Nonword Reading

Say, "Here are some words for you to read out loud." [Indicate practice words on page # of Stimulus Book.] These are pretend words that are not real words, but they are like real words. I want you use what you know about words to read these words out loud."

Stimulus word	Expected production (and acceptable alternatives)	Score
1. keb	/kɛb/	0 1
2. pog	/pɒg/	0 1

Stimulus word	Expected production (and acceptable alternatives)	Score
22. kzmancian	/kɪz mɑː nɪʃ iən/	0 1
23. gorenobia	/gɒ rən tə bi ə/	0 1
24. smofnious	/smɒf iʊ s/	0 1

11. Reading Fluency

Say, "We are going to pretend that you are writing a story for your school newspaper. First, your job is to read some facts out loud that will be in the story. Then, I'll show you how to put the facts together to sound more interesting. We'll do one for practice first."

Story 6

The Principal's Daughter
She has a pet rabbit.
The principal has a daughter.
Her name is Sara.
She wants to be a clown.
She came to school.
She got on her feet.
She walked into a class.
The children were playing.
Some children were funny.
The children were playing.
She took off her red nose.
The children were happy.
They knew Sara.

Story elements	Score	Story elements	Score
1. The Principal's Daughter	0.5	11. it was big	0.5
2. She has a pet rabbit	0.5	12. she walked into a class	0.5
3. The principal has a daughter	0.5	13. The children were young	0.5
4. Her name is Sara	0.5	14. The children were funny	0.5
5. She wants to be a clown	0.5	15. Some children (one)	0.5
6. She came to school	0.5	16. They were happy	0.5
7. She got on her feet	0.5	17. She took off her red nose	0.5
8. She walked into a class	0.5	18. The children were happy	0.5
9. The children were playing	0.5	19. They knew Sara	0.5
10. Some children were funny	0.5		

12. Written Expression

Say, "Remember how we talked about writing a story? Here is an example of how you could put the facts together in 'The Little Dog' story to make it sound less choppy and more interesting. [Read the story on p. 7 of the Student Book out loud to the student.] Now it's your turn to put the facts for your story together in a way that sounds better."

STORY 6: THE PRINCIPAL'S DAUGHTER

The Principal's Daughter
She has a pet rabbit.
The principal has a daughter.
Her name is Sara.
She wants to be a clown.
She came to school.
She got on her feet.
She walked into a class.
The children were playing.
Some children were funny.
The children were playing.
She took off her red nose.
The children were happy.
They knew Sara.

STORY 6: THE PRINCIPAL'S DAUGHTER

The principal has a daughter. Her name is Sara. She wants to be a clown. She came to school. She got on her feet. She walked into a class. The children were playing. Some children were funny. The children were playing. She took off her red nose. The children were happy. They knew Sara.

Stimulus word	Expected production (and acceptable alternatives)	Score
1. keb	/kɛb/	0 1
2. pog	/pɒg/	0 1

Story B

The Principal's Daughter
 We have a principal.
 The principal has a daughter.
 Her name is Sara.
 She wants to be a clown.
 She came Monday.
 She came to our school.
 She put on makeup.
 She looked scary.
 She walked into a class.
 The children were young.
 The children saw her.
 Some children cried.
 They were scared.
 She took off her red nose.
 The children were happy.
 They knew Sara.

Formal Writing Assessment

Student Name: _____

Our principal has a daughter. Her name is Sara and she wants to be a clown. On Monday she came to our school. She put makeup on which made her look scary. She walked into a class for Young Kids. They saw her and immediately they got scared. Some children started to cry. She took her red nose off and the kids got happy because they knew Sara.

We have a principal and she has a daughter. Her name is Sara and she wants to be a clown. She came Monday to our school. She put on make up and she looked scary. She walked into class. The children were young. The children saw her. Some children cried.

Work with Cheryl Scott, Sally Andersen, Michelle Magalski

13. Social Communication

Say, **"This activity is about acting a scene, like from a show on TV or a movie. Your job is to be an actor."** (Ask if the student ever watches movies, plays, or television shows and knows what an actor is.) Say, **"I'll give you a really short scene. Then I'll ask you to tell me what one of the people would say. This is important—you should say it how the person would say it in the scene. Remember, you're the actor! Let's try one. I'll do the first one to show you."**

David always uses hints to get his grandmother to buy him things. David is out shopping with his grandmother and sees some boots he wants. What do you think David would say?

14. Digit Span Forward

15. Digit Span Backward

14. Say, **"I am going to say some numbers. Listen to the numbers, and when I finish, you say them back to me exactly the same way."**

15. **"This time, when I read the numbers to you, I want you to listen carefully and say them back to me in backward order."**

Stimulus	Student's response	Score	Stimulus	Student's response	Score
1A. "7-3"	(5-7)	0 1	5A. "8-2-8-1-4"	(8-2-8-1-4)	0 1
2A. "8-8-2"	(2-8-8)	0 1	6A. "7-6-1-4-8"	(8-4-1-6-7)	0 1
3A. "6-4-9-3"	(3-4-4-6)	0 1	7A. "8-2-8-8-1-4"	(4-1-8-8-2-8)	0 1
4A. "7-6-1-4-8"	(8-4-1-6-7)	0 1	8A. "1-7-3-8-6-2-8"	(8-2-6-8-3-7-1)	0 1
5A. "8-2-8-8-1-4"	(8-2-8-8-1-4)	0 1			
6A. "1-7-3-8-6-2-8"	(8-2-6-8-3-7-1)	0 1			

Step 4-5: standardize – 2010-2014

Standardization version will:

- use data from current identification trial
- result in normative data
- include sub-studies of special groups
 - Students with intellectual disability/MR
 - Students with autism spectrum disorders
 - Students with hearing loss/cochlear implants

Standardized tests

- Validity
 - Construct
 - Content
 - Sensitivity and specificity
 - Limited bias
- Reliability
 - Internal stability (Cronbach's alpha)
 - Test-retest reliability
 - Inter-scoring reliability
- Usability
 - Child friendliness
 - Clinician relevance
 - Easy to administer
 - Easy to score
 - Easy to interpret

Sensitivity, Specificity, and Likelihood Ratio for Beta Trial composite scores (N = 97)

Grade	Sound/Word Composite				Vocabulary Composite				Sentence/Discourse Composite			
	Sensitivity to LLD	Specificity for NL	LR+	LR-	Sensitivity to LLD	Specificity for NL	LR+	LR-	Sensitivity to LLD	Specificity for NL	LR+	LR-
1-2	100	89	9.1	0.0	89	100	8.9	0.1	100	88	8.3	0.0
3-5	92	84	5.8	0.1	92	80	4.6	0.1	100	88	8.3	0.0
6-8	100	87	7.7	0.0	100	80	5.0	0.01	100	80	5.0	0.0
9-12	80	80	4.0	0.3	100	80	5.0	0.01	83	80	4.2	0.2

59 students with NL distributed across grades : 1-2 (n = 9); 3-5 (n = 25); 6-8 (n = 15); 9-12 (n = 10)
 38 students with LLD distributed across grades: 1-2 (n = 9); 3-5 (n = 12); 6-8 (n = 11); 9-12 (n = 6)
 (all with CELF-4 scores <85)

Barbara M. Howes, PhD, LMSW
 School of Social Work
 Western Michigan University

EARLY PILOT INVESTIGATIONS

Results from whole-class pilot investigations
 Changes made based on results and focus-group input

The need

A validated tool for gathering input to contribute to decisions

Relevance
 Evidence-based practice
 The law

- ## Development of the pilot LLQ
- Expert panel review
 - Fully orthogonal 52-item scale
 - Levels
 - Sound
 - Word
 - Sentence
 - Discourse
 - Communication Modalities
 - Listening
 - Speaking
 - Reading
 - Writing
 - Social skills
 - Other questions about curriculum-related issues (e.g., attention, direction following)

Classroom Observations

No agreement time limit and useful attention to these questions about the student. It will help the research team at Western Michigan University learn more to improve the performance and use of a large number of teachers in school. If you do not use to complete the performance, you will not be provided. If you do agree to participate, please complete by following instructions.

Please Responding: General Ed. Teacher Special Ed. Teacher

Observer's Name: _____ Grade: _____

Instructions: Circle the number that best tells how often the student demonstrates the described skill:
 1 = 10% of the time (25% of the time) 2 = 25% of the time (50% of the time) 3 = 50% of the time (75% of the time) 4 = 75% of the time (100% of the time)

The student does...at least	at least	at least
1	2	3
1. Listening	1-2-3-4	1-2-3-4
2. Using a graph/calculator	1-2-3-4	1-2-3-4
3. Understanding difficult vocabulary when reading	1-2-3-4	1-2-3-4
4. Writing notes	1-2-3-4	1-2-3-4
5. Engaging in group discussion	1-2-3-4	1-2-3-4
6. Drawing pictures	1-2-3-4	1-2-3-4
7. Understanding vocabulary when listening	1-2-3-4	1-2-3-4
8. Finding when one statement makes sense	1-2-3-4	1-2-3-4
9. Remembering what is said	1-2-3-4	1-2-3-4
10. Writing responses	1-2-3-4	1-2-3-4
11. Finding when one statement makes sense	1-2-3-4	1-2-3-4
12. Finding when one statement makes sense	1-2-3-4	1-2-3-4
13. Finding when one statement makes sense	1-2-3-4	1-2-3-4
14. Finding when one statement makes sense	1-2-3-4	1-2-3-4
15. Finding when one statement makes sense	1-2-3-4	1-2-3-4
16. Finding when one statement makes sense	1-2-3-4	1-2-3-4
17. Finding when one statement makes sense	1-2-3-4	1-2-3-4
18. Finding when one statement makes sense	1-2-3-4	1-2-3-4
19. Finding when one statement makes sense	1-2-3-4	1-2-3-4
20. Finding when one statement makes sense	1-2-3-4	1-2-3-4
21. Finding when one statement makes sense	1-2-3-4	1-2-3-4
22. Finding when one statement makes sense	1-2-3-4	1-2-3-4
23. Finding when one statement makes sense	1-2-3-4	1-2-3-4
24. Finding when one statement makes sense	1-2-3-4	1-2-3-4
25. Finding when one statement makes sense	1-2-3-4	1-2-3-4
26. Finding when one statement makes sense	1-2-3-4	1-2-3-4
27. Finding when one statement makes sense	1-2-3-4	1-2-3-4
28. Finding when one statement makes sense	1-2-3-4	1-2-3-4
29. Finding when one statement makes sense	1-2-3-4	1-2-3-4
30. Finding when one statement makes sense	1-2-3-4	1-2-3-4
31. Finding when one statement makes sense	1-2-3-4	1-2-3-4
32. Finding when one statement makes sense	1-2-3-4	1-2-3-4
33. Finding when one statement makes sense	1-2-3-4	1-2-3-4
34. Finding when one statement makes sense	1-2-3-4	1-2-3-4
35. Finding when one statement makes sense	1-2-3-4	1-2-3-4
36. Finding when one statement makes sense	1-2-3-4	1-2-3-4
37. Finding when one statement makes sense	1-2-3-4	1-2-3-4
38. Finding when one statement makes sense	1-2-3-4	1-2-3-4
39. Finding when one statement makes sense	1-2-3-4	1-2-3-4
40. Finding when one statement makes sense	1-2-3-4	1-2-3-4
41. Finding when one statement makes sense	1-2-3-4	1-2-3-4
42. Finding when one statement makes sense	1-2-3-4	1-2-3-4
43. Finding when one statement makes sense	1-2-3-4	1-2-3-4
44. Finding when one statement makes sense	1-2-3-4	1-2-3-4
45. Finding when one statement makes sense	1-2-3-4	1-2-3-4
46. Finding when one statement makes sense	1-2-3-4	1-2-3-4
47. Finding when one statement makes sense	1-2-3-4	1-2-3-4
48. Finding when one statement makes sense	1-2-3-4	1-2-3-4
49. Finding when one statement makes sense	1-2-3-4	1-2-3-4
50. Finding when one statement makes sense	1-2-3-4	1-2-3-4
51. Finding when one statement makes sense	1-2-3-4	1-2-3-4
52. Finding when one statement makes sense	1-2-3-4	1-2-3-4

Corroborating Information

Multiple sources
 Co-norming Student Rating Scale

Test of Integrated Language and Literacy Skills™ – Student Rating Scale (TILLS™-SRS)
 (Standardized Version 1)
 by Nickola Wolf Nelson, Ph.D., and Barbara M. Howes, Ph.D.

Your time and careful attention will help the research team learn how to improve this rating scale. If you are willing to help, please complete all items. If you have questions, call Dr. Anderson at 616.335.4444 or see your local contact person.

Please Responding: General Ed. Teacher Special Ed. Teacher Other _____

Observer's Name: _____ Student's grade level: _____ Today's date: _____

Completed with other students of the same age, circle the number to show how good this student is at:	Not good	Very good
1-2-3-4-5	1-2-3-4-5	1-2-3-4-5
1. Understanding common vocabulary words	1-2-3-4-5	1-2-3-4-5
2. Using school vocabulary words when talking	1-2-3-4-5	1-2-3-4-5
3. Figuring out new words when reading	1-2-3-4-5	1-2-3-4-5
4. Reading words correctly when writing	1-2-3-4-5	1-2-3-4-5
5. Understanding a story when listening	1-2-3-4-5	1-2-3-4-5
6. Writing a story that makes sense	1-2-3-4-5	1-2-3-4-5
7. Understanding a story when reading	1-2-3-4-5	1-2-3-4-5
8. Writing a story that makes sense	1-2-3-4-5	1-2-3-4-5
9. Following spoken directions	1-2-3-4-5	1-2-3-4-5
10. Being organized about school work	1-2-3-4-5	1-2-3-4-5
11. Paying attention in school	1-2-3-4-5	1-2-3-4-5
12. Working socially with other students	1-2-3-4-5	1-2-3-4-5

Please check the things that you think are easiest for this student to do:
 Reading Writing Drawing Music Mechanical Sports Math Social Listening Talking

Please check the things that you think are hardest for this student to do:
 Reading Writing Drawing Music Mechanical Sports Math Social Listening Talking

What one thing do you think is most important to help this student as better at school?

Social Work Perspective

- Strengths based perspective
 - Behavioral issues
- Add a qualitative piece to the pilot study
 - To get input from informants on their experience when completing the questionnaire
 - To “tell the story” that may not be captured through the questionnaire ratings
- Ethnographic interviewing in focus groups with three sets of informants

Pilot Study

- Rural and urban mid-west schools
- Test/retest in December and April
- Full class administration including students with special needs
- Grades 2,4,6, & 9
 - Grade 2 (n= 36)
 - Grade 4 (n=18)
 - Grade 6 (n= 21)
 - Grade 9 (n = 7)
- Focus groups for each group of informants:
 - Teachers (n = 11)
 - Parents (n = 10)
 - Students (n = 10)

Pilot Study

- Composite scores were developed for listening, reading, and spelling items on the questionnaires
- Also trying out new subtests
- Looked at correlations between
 - Teacher and student ratings
 - Test-retest ratings

Focus on student scores from the spelling subtest for the purposes of this presentation

Sample Items on the Teacher LLQ

The student shows skill at...	Almost Never	Almost Always
29. Spelling words.	1-----2-----3-----4	
33. Thinking of words that rhyme.	1-----2-----3-----4	

Quantitative Results of Pilot Study

- All informants were consistent with themselves (intra-rater reliability) on test-retest
- No correlation between informants
- No correlation between students’ scores on the non-word spelling items and the ratings on the “spelling items” of the questionnaire
- Parent response rate was too low to analyze data

Quantitative Results of Pilot Study

- The value of results from different informants that do not correlate with each other
 - All can be accurate given exposure to the child, or child’s perspective
 - Provide additional information as a supplement to standardized testing – adds to the richness of the assessment
 - Acknowledging differences as a launching point for dialogue among informants

Qualitative Results of Pilot Study

- **Three groups of informants agreed**
 - “It was too long!”
 - “It seemed like you asked some of the questions over and over again.”
- **Parents**
 - “It helped put some of the areas my child may need help in, into perspective.”
 - “It made me really stop and think about where P. really is... and analyze where he really is, so I thought it was great!”
 - “You should send this home every year to help

Qualitative Results (cont.)

- **Parent**
 - “I was just glad they asked me. I been wanting something like this. I think it’s great... because I want to know how interested you (the school) are in my child...”
 - “...would be good to use during parent teacher conferences, too for communication, you know, that’s the number one thing, so there’s no mix up...”
- **Children**
 - “I didn’t know what the numbers meant, so I just

Revision of Questionnaire

- Clarification of reference group
 - From: “The student shows skills at...”
 - To: “Compared to other students at the same grade level...”
- Change scale from temporal to ability
 - From: “Almost never – Almost always”
 - To: “Not good – Very good”
- Increased range of response options
 - From: 1-4 Likert scale
 - To: Visual analog scale – mark on a continuum
- Reduced items from 52 to 13
- Simplified the language

Revision (cont.)

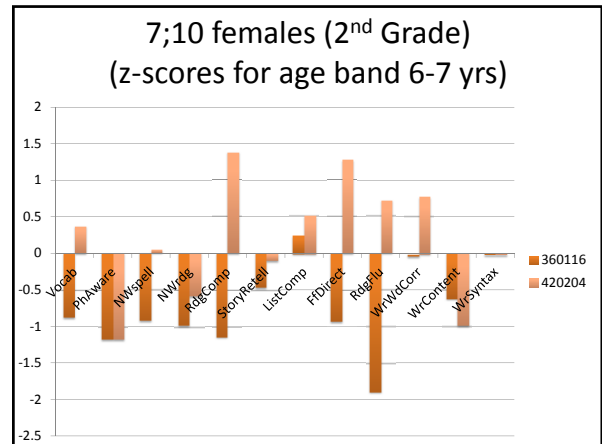
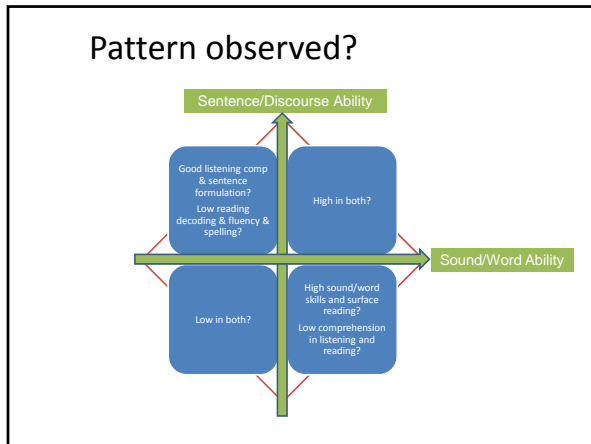
- Added questions (social work perspective)
 - students’ top and lowest ability area with check boxes
 - art, music, social skills, communicating by talking, sports, math, reading and writing, and other
- Added open ended question
 - “What improved skill do you think would most help this student do better in school?”
- Next step
 - Conduct beta trial investigation using the revised tools

Differential Diagnosis

**CASE EXAMPLES FROM
STANDARDIZATION RESEARCH**

What’s next?

**MAKING DECISIONS FOR
INTERVENTION PLANNING**



Written Expression on TILLS

Input content units

Written output
(360116)

The Class Pet
The class has a pet. It is a hamster. The hamster has spots. Some are brown. Some are white. It got out. It was one day last week. The cage was open. The door was open. The children looked. The children found him. They put him back. They put him in the cage. They closed the door. He found a corner. He went to sleep.

Student's Written Story
The hamster has spots. / Som are brown / Som are white. /

Time: 10 minutes
3/16 content units = 19%
3 content/3 T-units = 1.00 SCI
7/10 wds without error = 70%

Story A: "The Class Pet"					
1. The class has a pet.	0	1	9. The door was open.	0	1
2. It is a hamster.	0	1	10. The children looked.	0	1
3. The hamster has spots.	0	1	11. The children found him.	0	1
4. Some are brown.	0	1	12. They put him back.	0	1
5. Some are white.	0	1	13. They put him in the cage.	0	1
6. It got out.	0	1	14. They closed the door.	0	1
7. It was one day last week.	0	1	15. He found a corner.	0	1
8. The cage was open.	0	1	16. He went to sleep.	0	1
Content Units total		/16			

Corroborating evidence from student rating scale (SRS)

Gen ed Teacher ratings

Parent ratings

Test of Integrated Language and Literacy Skills™ – Student Rating Scale (TILLS™-SRS)

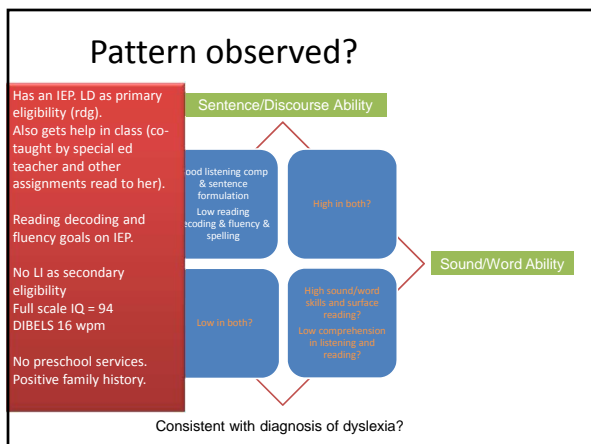
360116

Item	Gen Ed Teacher
1. I understand what I read.	1
2. I can read and understand what I am reading.	1
3. I can read and understand what I am reading.	1
4. I can read and understand what I am reading.	1
5. I can read and understand what I am reading.	1
6. I can read and understand what I am reading.	1
7. I can read and understand what I am reading.	1
8. I can read and understand what I am reading.	1
9. I can read and understand what I am reading.	1
10. I can read and understand what I am reading.	1
11. I can read and understand what I am reading.	1
12. I can read and understand what I am reading.	1

Test of Integrated Language and Literacy Skills™ – Student Rating Scale (TILLS™-SRS)

420204

Item	Parent
1. I understand what I read.	1
2. I can read and understand what I am reading.	1
3. I can read and understand what I am reading.	1
4. I can read and understand what I am reading.	1
5. I can read and understand what I am reading.	1
6. I can read and understand what I am reading.	1
7. I can read and understand what I am reading.	1
8. I can read and understand what I am reading.	1
9. I can read and understand what I am reading.	1
10. I can read and understand what I am reading.	1
11. I can read and understand what I am reading.	1
12. I can read and understand what I am reading.	1



INTERVENTION

- Use strengths, target weaknesses, make connections
 - Teach and solidify skills that are missing, underdeveloped, or laborious
 - Help children develop awareness of cues and integrate skills (some they may have but are not bringing on line) across modalities and levels to make sense
 - Provide guided practice to build automaticity and fluency while continuing to focus on the communicative value of the experience
- Use curricular materials and contexts
 - Work within broader systems to support function and participation
 - Stay as whole as you can, but go as part as you have to (paraphrase of Barbara Ehren)
- Gather periodic probes to document progress and decide next steps
 - Engage children and adolescents in monitoring and documenting progress
 - Celebrate success!

**Dynamic (curriculum-based)
language Assessment & intervention**

Start with a contextualized task that has been selected with parent and child input...Ask – What would I have to do to complete this task? (Expected Response)

- Assess
- Intervene
- Assess

- Observed response [OR]
- Observe independent approach to task.
- Note missed cues (What did child do?)
- [OR→ER]
- Frame and focus the child on missed cues
- (Show child how to bridge the gap.)
- Expected response [ER]
- Observe independent use of cues
- Observe fluency and automaticity in integrated contexts

Tools for Assessing Reading & Writing

- www.wmich.edu/hhs/sppa "special projects"
- Leslie, L., & Caldwell, J. S. (2011). *Qualitative Reading Inventory-5*. Boston, MA: Pearson.
- Nelson, N. W., Bahr, C. M., & Van Meter, A. M. (2004). The writing lab approach. Baltimore, MD: Paul H. Brookes Publishing.
- Nelson, N. W., & Van Meter, A. M. (2002). Assessing reading and writing samples for planning and evaluating change. *Topics in Language Disorders* 22(2), 47-72.

Periodic probes

Writing Lab Outreach Project Web site www.wmich.edu/hhs/sppa "special projects"

Skills to observe and target

Reading Probes	Writing Probes
<ul style="list-style-type: none"> • Sound/Word Level <ul style="list-style-type: none"> – Letter → Sound – Orthographic patterns → Syllable/Morpheme <ul style="list-style-type: none"> • tough, rough • like, likes; Mike, Mike's – Whole word fluency • Sentence/Discourse Level <ul style="list-style-type: none"> – Paraphrase text – Point our referents across sentence boundaries – Answer questions – Draw inferences – Summarize or retell passages 	<ul style="list-style-type: none"> • Sound/Word Level <ul style="list-style-type: none"> – Sound → Letter – Phonetic → Word/ Morpheme/ Syllable → Orthographic pattern – Handwriting fluency • Sentence/Discourse level <ul style="list-style-type: none"> – Plan strategically <ul style="list-style-type: none"> • Generate idea • Organize content – Formulate sentences orally → transcribe into print – Use variety of sentence structures; written grammar – Keep audience in mind re amount of detail – Reread and make edits

Sound-symbol association (alphabetic principle)

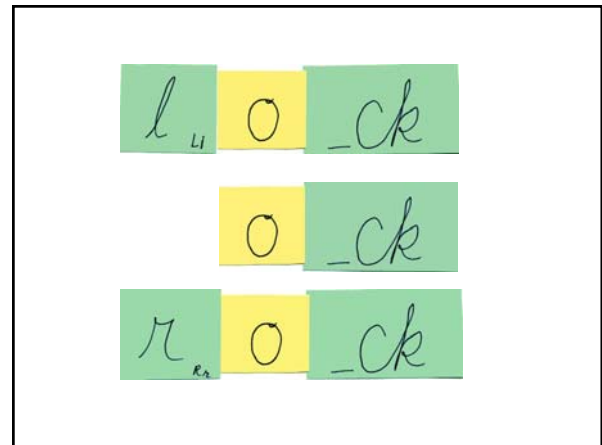
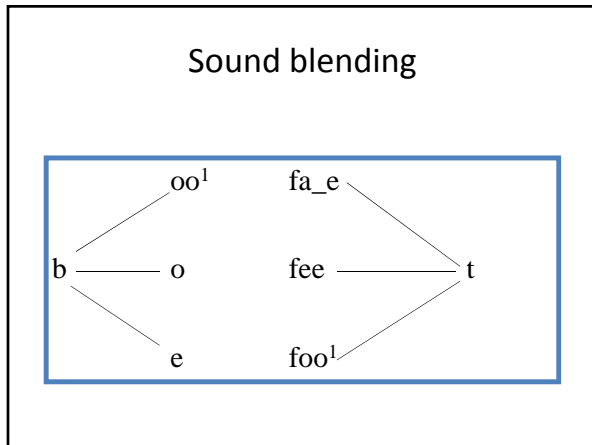
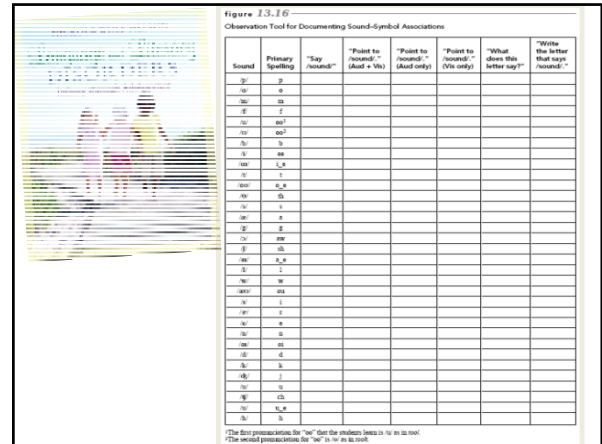
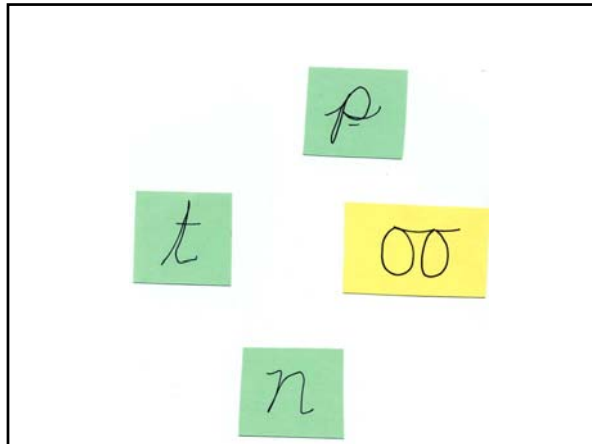
Low phonemic awareness
Inadequate sound-symbol association knowledge
Misses orthographic cues about how to pronounce vowels
Reading fluency is a big problem
Spelling rated lowest by both teacher and parent

- Use multi-modality, multi-sensory approach to make sound-symbol association automatic
- Sound/letter → speech "Say /p/"
 - Make page for "My Sounds & Letters Book"
 - Symbol chip (avoid letter names)
 - Precise articulation; attention to distinctive features
- Sound/speech (visual or aud only) → symbol "Point to /p/"
 - From array of easily distinguished sounds/letters

e e p t
m o s a e
- Symbol → sound "What sound does this letter make?"
- Sound → letter "Write /p/"

Sources

- Barrie-Blackley, S. (2011). The Structure of Written English & Orton-Gillingham for SLPs [online course] <http://support.lexercise.com/entries/20510387-lexercise-professional-education-courses>
- DuBard, E. (1974). *Teaching aphasics and other language deficient children: Theory and application of the association method*. Hattiesburg, MS: University Press of Mississippi.
- Lindamood, P., & Lindamood, P. (1998). *Lindamood phonemic sequencing program for reading, spelling, and speech* (LiPS; formerly called *Auditory Discrimination in Depth*). Austin, TX: ProEd.
- Monsees, E. K. (1972). *Structured language for children with special language learning problems*. Washington, DC: Children's Hospital National Medical Center.
- McGinnis, M. (1963). *Aphasic children*. Washington, DC: A. G. Bell Association.



Word Pattern Recognition (Orthographic Principle)

Tries to "sound out" words, need to develop a "direct route"

Misses orthographic cues about how to pronounce vowels

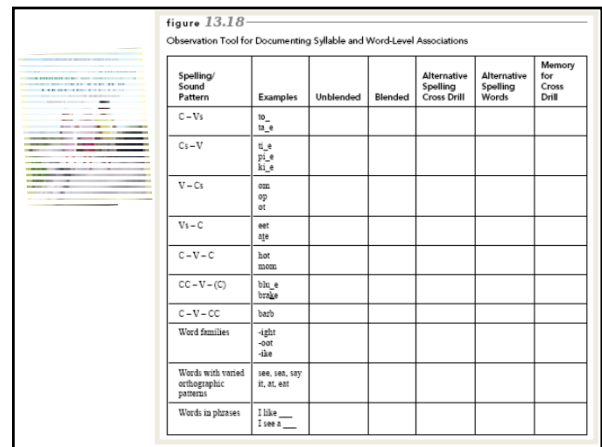
Reading fluency is a big problem

Is she aware of inflectional and derivational morphemes?

Is she using relatively better sentence/ discourse skills to assist with fluency?

Can she monitor comprehension - "Does that make sense?"

- Consonant → Vowel
 - Single consonant → multiple vowels
 - Multiple consonants → single vowel
- Vowel → Consonant
 - Single vowel → multiple consonants
 - Multiple vowels → single consonant
- CVC
- Onset → Rime
 - Common "word families"
- Morphology ↔ Orthography
 - Common "chunks" -ing, -tion, un-, dis-



alternative spellings for vowels

i_e	igh	_y
o_e	oa	_ow ²
a_e	ai	_ay

Combine work on speech & literacy

see	see	see
sa_e	say	sai_
si_e	si_e	sigh
so_e	soa	so
soo	sou	sue

Fluent Word Recognition/Spelling with Connection to Form & Meaning in Context

Limited or inefficient strategies for difficult text.
Difficulty monitoring sense-making.

- Reading → Saying
 - What sound do you see at the beginning of that word?
 - Get your mouth ready; find it in your brain
 - Do you see a chunk that you know? What's the first chunk?
 - Does that make sense?
 - Read along with me. Hop on my finger.
- Saying → Spelling
 - Say the word you want to spell
 - Say it slowly; What sound do you say first?
 - Say it in chunks
 - That says _____. Is that what you wanted?
What letter do you need to get me to say _____?
 - Let me show you a neat little word family. We can make a new page in your author notebook.

Word Families (analogical processes)

Misses cues about orthographic regularities in reading and spelling.
Limited use of analogical reading strategies.

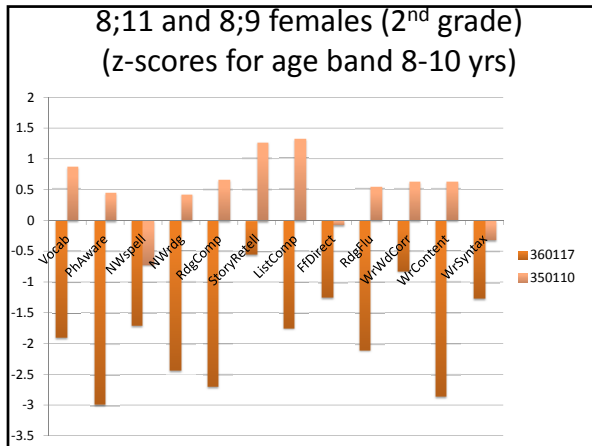
Comprehension & Composition

Decoding & fluency problems are interfering with reading comprehension.
Difficulty formulating sentences in Social Communication task and in Written Expression
Omitted content in Written Expression
Word level interference with sentence/discourse level processing

- Start with expression of own ideas
 - Orally
 - In writing
 - General principle: Elaboration before correctness
- Dynamic assessment/scaffolding of area of breakdown
 - Missing key vocabulary?
 - Direct instruction, illustration, application in new contexts
 - Sentence level?
 - Paraphrasing
 - Sentence verification
 - Discourse level?
 - Detecting macrostructure
 - Organizing texts to achieve a communicative purpose

Other students?

Consider profiles



written expression on tills

Input content units

Written output
(360117)

The Principal's Daughter

We have a principal.
The principal has a daughter.
Her name is Sara.
She want
She came
She had
A ball wa
It was rec
It was big
She looke
She walk
The child
The children saw her.
Some children cried.
They were scared.
She took off her wig.
The children were happy.
They knew Sara.

Student's Written Story

*we have a Princi Pal / The Princi had
had a daughter / The name is Sara /*

Time: 6 minutes
3/20 content units = 19%
3 content/3 T-units = 1.00 SCI
8/10 wds without error = 80%

Child said, "I wrote it without the periods so it makes it not so"

Pattern observed?

No IEP (360117 is in our LLR group)

Only service mentioned by parent is "reading intervention" at school.

Teachers report attention and social issues, needs math and writing RtI interventions, Special Ed teacher has concerns about possible ASD. Parents decline to discuss.

One year later, still no IEP. School personnel are concerned.

Sentence/Discourse Ability

Sound/Word Ability

Good listening comp & sentence formulation

Low reading coding & fluency & spelling?

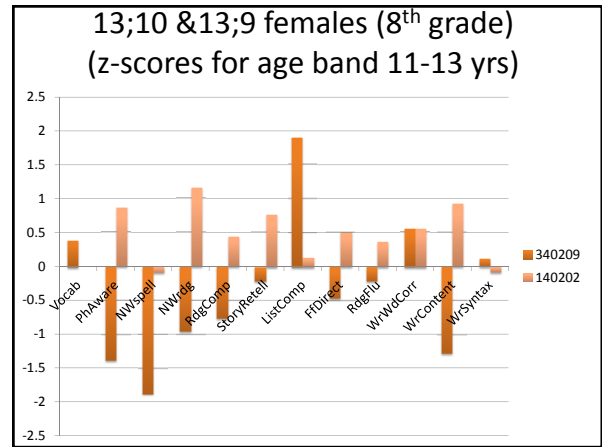
High in both?

High sound/word skills and surface reading?

Low comprehension in listening and reading?

Low in both?

Consistent with diagnosis of dyslexia?
Consistent with diagnosis of specific comprehension deficit?
Consistent with a diagnosis of ASD?



written expression on tills

Input content units

Written output
(340209)

When the School Closed

Our school was closed.
It was last Wednesday.
It was closed all day.
The janitor came in at 6 a.m.
He opened the school.
He smelled something.
It was strong.
It almost knocked him over.
It was a skunk.
He opened the doors.
He left them open.
He searched.
He looked in the library.
He looked in the cafeteria.
He found the skunks.
There were two.
They were eating cookies.
They had eaten many.
They looked full.
He called animal control.
He called right away.
The workers came.
They took the skunks.
They let them go.
It was in the woods.
The smell stayed.
It was in the building.
The smell finally left.
It took one week.
The school smelled normal.

*Our school was closed last Wednesday /
The janitor came in at 6 a.m. and was also
knocked out by the strong smell of skunk /
He left the doors open for several days /
He looked in the library and cafeteria. He found the
skunks. They were eating cookies and looked very
full. He called animal control and they took the skunks
to the woods. The building smelled for a week /
and it smells normal. / 75*

Pattern observed?

IEP at school and private speech and language Tx (340209)

Eligibility in speech, language, LD, reading: Goals in reading decoding, reading comprehension, spelling, written expression.

GORT-4 (73 SS; 4 %ile)
Rate=4
Accuracy=5
Fluency=2
Comprehension=9

ITPA-3
Spelling 82 (12 %ile)
Sound/symbol 79 (8 %ile)

Sentence/Discourse Ability

Sound/Word Ability

Good listening comp & sentence formulation

Low reading coding & fluency & spelling?

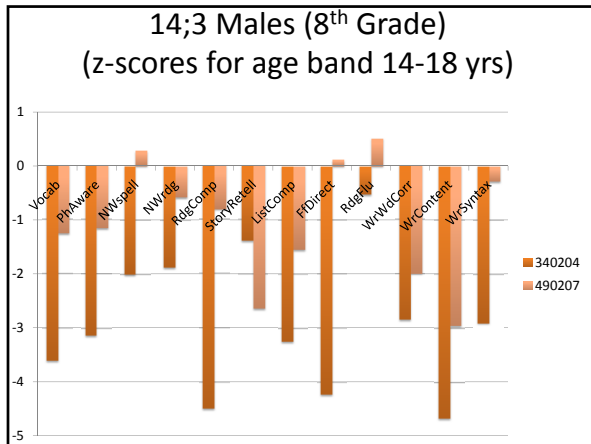
High in both?

High sound/word skills and surface reading?

Low comprehension in listening and reading?

Low in both?

Consistent with diagnosis of dyslexia?
Consistent with diagnosis of oral and written language impairment?



The Building

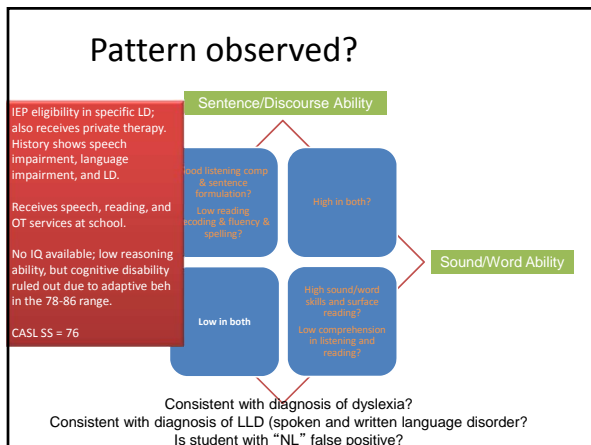
ten expression on tills

340204 with LLD

There was a building. It was old. No one knew how it had history. People talked about it. Some people knew it was used in a garage. The building was very tall and it had a parking garage with it and you can park you in it! You can eat lunch in it! The grave yard was very still nothing more in it! The building is still there in it history!

490207 WITH NL

There is an old building that no one cared about. The building was used as a hospital during a war. Lots of soldiers came here when they got wounded many of them died. The ones who died got buried in the back at the graveyard. People had forgotten about the building until they started to demolish it so they could build a road. When people started to go...



Common Core State Standards 3rd Grade Narrative Writing

3. Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.

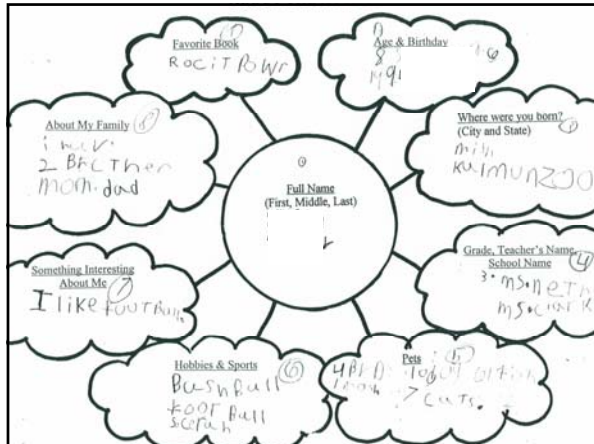
- Establish a situation and introduce a narrator and/or characters; organize an event sequence that unfolds naturally.
- Use dialogue and descriptions of actions, thoughts, and feelings to develop experiences and events or show the response of characters to situations.
- Use temporal words and phrases to signal event order.
- Provide a sense of closure.

Case Study for "Chuck"

- Male, Caucasian
- Participant in writing lab in general ed classroom
- Mid Grade 2 through Grade 3
- LI + LD (but only the LD was diagnosed)

Acknowledgments to student clinicians: Pam Ansell, Kelly Brandon, Amanda Luna, Kelli Talicska, and colleague, Adelia Van Meter

- Nelson, N. W., Bahr, C. M., & Van Meter, A. M. (2004). *The Writing Lab Approach to Language Instruction and Intervention*. Baltimore, MD: Paul H. Brookes Publishing Co., Inc.
- Nelson, N. W., Roth, F., & Van Meter, A. M. (2008). *Written Composition Instruction and Intervention for Students with Language Impairment*. In G. Troia (Ed.), *Instruction and Assessment for Struggling Writers*. NY: Guilford.



Common Core State Standards 3rd Grade Narrative Writing

3. Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.
- Establish a situation and introduce a narrator and/or characters; organize an event sequence that unfolds naturally.
 - Use dialogue and descriptions of actions, thoughts, and feelings to develop experiences and events or show the response of characters to situations.
 - Use temporal words and phrases to signal event order.
 - Provide a sense of closure.

Fall 3rd grade draft
p. 2

- Isolated description (heaps)
- Action (temporal) sequence ("What next?" strategy often linked by *and*, *so*, *then*)
- Reactive sequence (causally linked, without planning)
- Abbreviated episode (Problem stated; character's intentions implied, e.g. "decided to")
- Complete episode (Plan stated; explicit goal setting; clear ending)
- Complex/multiple episodes

How T-units make a difference "Saying more in fewer words." (Hunt)

<p>Child</p> <p>C The boy saw his friend. [5 wds]</p> <p>C The friend looked happy, [4 wds]</p> <p>C but it was going to be a bad day. [9 wds]</p> <p>C He just didn't know it yet. [6 wds]</p> <p>C Then the teacher made an announcement. [6 wds]</p> <p>C The field trip had been cancelled. [6 wds]</p> <p>[36 words / 6 T-units = 6.0 MLTU]</p>	<p>Child</p> <p>C The boy saw his happy friend, who didn't know yet that it was about to become a bad day. [19 wds]</p> <p>C It was then that the teacher announced that the field trip had been cancelled. [14 wds]</p> <p>[33 words / 2 T-units = 16.5 MLTU]</p>
--	--

	Characters Who or what is in your story? me, mom, dad, L J, and a man	Using planning template in 3 rd grade
	Setting Where does your story take place? When does it take place? in my car I was going to spring	
	Problem What problem is going on here? car was a dirt	
	Events What events happen in the story? What are some really neat things that bring the problem closer to a solution? I am proud that I was saved	
	Solution How do the characters solve the problem? The person mother was a dirt me save my life	

Self-talk Questions: Writing Sentences

What can I do to make interesting sentences that sound right?

- Think of what I want my reader to know.
- Say the sentence to myself.
- Write it or type it a word at a time.
- Read it again or have the computer read it.
- Does it sound right?
- Should I fix anything?

Word Level

- Vocabulary knowledge: Ask students about words they know and could use in particular context
- Phonologic awareness: Have students slowly sound out the word while spelling
- Orthographic representation: Draw attention to the orthography and ask about spelling patterns
- Morphologic knowledge: Ask how a word could be chunked to determine morphological awareness

Self-talk Questions: Spelling new words

What can I do when I don't know how to spell a word?

1. Say the word slowly to myself.
2. Listen to and feel the sounds in order.
3. Does it belong to a word family I know?
4. Write it or type it.
5. Does it look right and have all the sounds?
6. Does the computer help me?
7. What should I do to remember this word?

Curriculum Activity: Animal Essay

Classroom lessons

- Vocabulary
- Take notes: read it, cover it, say it in your own words
- Drafting from notes

Individual Supports

- Reading decoding
 - *What sounds do you see?*
 - *Do you see a word part you know?*
- Comprehension
 - *What does that mean?*
 - *What does the author want us to know?*
 - *Say it in your words.*
- Questions to link ideas logically and add details
 - *What goes with that?*
 - *Is there anything else we should tell the reader?*

Animal Report: C's Zebra Notes

The animal I am researching is: <u>zebra</u>	
Provide a brief description of the animal.	all the way down to my eyes, see + that + the + face + the + black + ground + white + a + blue
What is the animal's food source?	grass and water and hay
Why does the animal migrate?	near to the water grass trees
Where does it migrate to?	South has not grass and scattered trees, and the road is grass and migrate to the water
When does the animal migrate?	When it is winter
Does the animal migrate alone or in a group?	in a group
What hazards (dangers) does the animal face?	Loose fingers, a gun, hyenas and wild dogs

Take-home points

- Differential diagnosis is possible
 - Sound/word level
 - Sentence/discourse level
 - All modalities
 - Social skills too, with external corroboration
- Assessment and intervention should take advantages of strengths while targeting areas of weakness in order to build connections
 - Focus on children's ideas and communication while helping them build and hone their skills.
 - Target elaboration before correctness.
 - Problems are not just within children, and neither are the solutions.

Questions?

Personal plans:
One principle to keep in mind...
One thing to try...