How to Get the Most Out of TILLS



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- As co-author of the Test of Integrated Language and Literacy Skills (TILLS), Nickola Nelson expects to receive royalties from the TILLS.

How to get the most out of TILLS

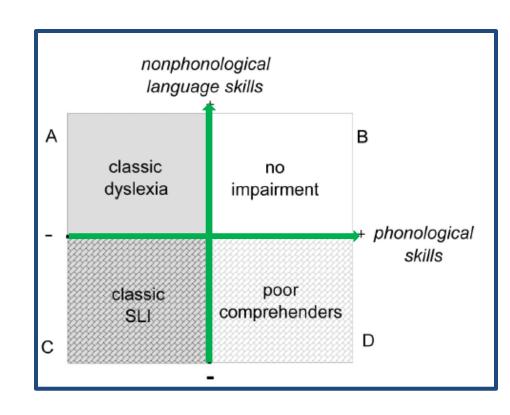
- Form a mental model of the constructs being assessed
- Administer the 15 TILLS subtests with awareness of what they require
- 3. Interpret the results for 3 validated purposes
 - Identify language/literacy disorder
 - Profile strengths and weaknesses
 - Track change over time (6 month intervals or longer)
- Consider teacher, parent, and student input on the Student Language Scale (SLS)
- 5. Collaborate with others to decide what to do next

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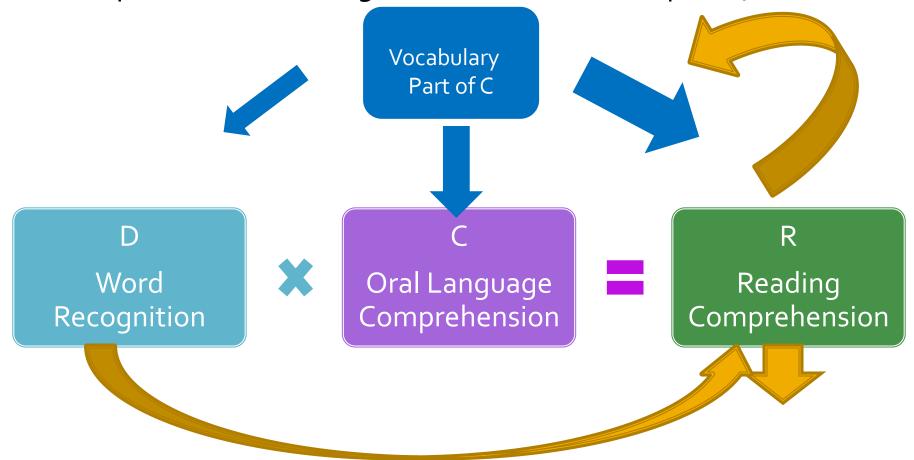
Form a mental model of constructs being assessed

Relationships of Disorders of Oral & Written Language

- Two dimensions may explain dyslexia and specific language impairment (SLI)
 - Phonological skills (sound/word level)
 - Nonphonological skills (sentence/discourse level)

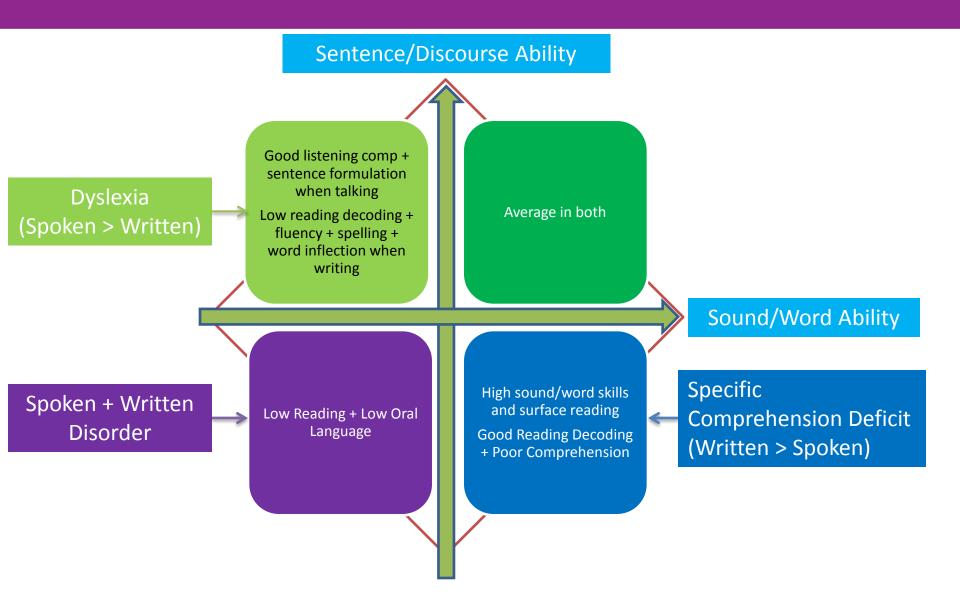


Simple View of Reading (SVR; Gough & Tunmer, 1986)
Simple View of Reading Redux (Tunmer & Chapman, 2012)



Pattern of Dyslexia Listening comprehension > Reading comprehension (Badian, 1999; Stanovich, 1994)

Applying the Quadrant Model



Administer TILLS Subtests with awareness of what they require



TILLS Language Levels X Modalities Model

	Language Level					
Modality	Sound/Word Level	Sentence/Discourse Level				
Listening	1.Vocabulary Awareness (VA) 2.Phonemic Awareness (PA)	6. Listening Comprehension (LC)8. Following directions (FD)				
Speaking	4. Nonword Repetition (NWRep)	3. Story retelling (Comp Qs) (SRcomp) 13. Social communication (SC)				
Reading	10. Nonword Reading (NWRd) 11. Reading Fluency (RF)	7. Reading comprehension (RC)				
Writing	5. Nonword Spelling (NWSp) 12c. Written Exp - word score (WEwd)	12a. Written Exp discourse score(Wedisc)12b. Written Exp sentence combining score (WEscs)				
Memory	14. Digit Span Forward (DSF)15. Digit Span Backward (DSB)	9. Delayed story retelling (DSR)				

Nelson, N. W., Plante, E., Helm-Estabrooks, N., & Hotz, G. (2015). Test of Integrated Language and Literacy Skills™ (TILLS™). Brookes Publishing Co., Inc.

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	
	dog	
	cat	
	bone	
	bone	

Practice Items

dog-cat-bone	dog-cat-bone
Both animals / pets	Dogs like / eat / chew / bury bones
light-sun-feather	light-sun-feather
Sun gives light / both bright	Feather is light / not heavy

2. Phonemic Awareness

"If the word is <u>bip</u>, and we take away the first sound, the word becomes [hesitate]... <u>ip</u>."

"If the word is <u>stig</u>, and we take away the first sound, the word becomes... <u>tig</u>."

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."

	9. stocked (put)		
Comprehension Questions 10. the refrigerator (fridge, icebox))	
Question	11. fruit (healthy foods [only scores on	ce] [nd	ot gra
1. Why did Tommy's mother worry about him?	12. carrots (carrot sticks, healthy t	foods	, vege
She thought he was getting fat/gaining weight.	ught he was getting fat/gaining weight. 13. she even put		
14. these things			
	15. in his lunchbox (lunch bag, lur	nch)	
2. How did Tommy trick his mother?	16. but Tommy (he)		
By trading his healthy foods for his friends' cookies. 17. was a "fast talker" (figurative median)			
3. Why did Tommy's mother feel confused?			
Because she was giving him healthy foods but he was still gaining weight.			
4. In the story you heard that Tommy was a fast talker. What do you think that meant?			
4. In the story you heard that Tommy was a fast talker. What do you think that meant? He was good at talking people into things/convincing/persuasive (not he could talk very fast).			

STORY 3A: "TOMMY THE TRICKSTER"

- Begin audio recording (recommended). Say, "I'm going to read you a story called 'Tommy the Trickster.' 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. Any questions?" (Answer.) "Let's begin."
- · Read the age-appropriate story, starting with its title, with a natural rate and tone.

"Tommy's mother thought he was getting fat from eating too much junk food. So, she stocked the refrigerator with fruit and carrot sticks. She even put these things in his lunchbox. But Tommy was a fast talker. At school he convinced his friends that cookies were bad for them. Then he traded his fruit and carrots for their cookies. His mother didn't know why Tommy kept gaining weight when all she had given him were healthy foods."

Say, "Now tell me the same story. Start now."

Content Units	Sc	ore
1. Tommy's (must use proper name to count on first instance)	0	1
2. mother	0	1
3. thought he (Tommy, worried)	0	1
4. was getting fat (bigger, gaining weight)	0	1
5. from eating	0	1
6. too much	0	1
7. junk food (cookies)	0	1
8. so she	0	1
9. stocked (put)	0	1
10. the refrigerator (fridge, icebox)	0	1
11. fruit (healthy foods [only scores once] [not grapes, etc.*])	0	1
12. carrots (carrot sticks, healthy foods, vegetables)	0	1
13. she even put	0	1
14. these things	0	1
15. in his lunchbox (lunch bag, lunch)	0	1
16. but Tommy (he)	0	1
17. was a "fast talker" (figurative meaning)	0	1

Content Units	Sc	ore
18. at school	0	1
19. he convinced (talked them into, told)	0	1
20. his friends	0	1
21. that cookies	0	1
22. were bad	0	1
23. for them	0	1
24. then he traded	0	1
25. his fruit (healthy foods [only scores once])	0	1
26. carrots (carrot sticks, healthy foods)		1
27. for cookies	0	1
28. his mother	0	1
29. didn't know why	0	1
30. Tommy (he)	0	1
31. kept gaining weight (getting bigger/fatter)		1
32. when all she had given him	0	1
33. were healthy foods	0	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 recording.

Subtest Items

	Item	Actual/target spoken response	Imitation score		
6–18	1. gid	/g ɪ d/	0	1	
	2. stenders	/s t ε n d → z/ /s t ι n d → z/	0	1	

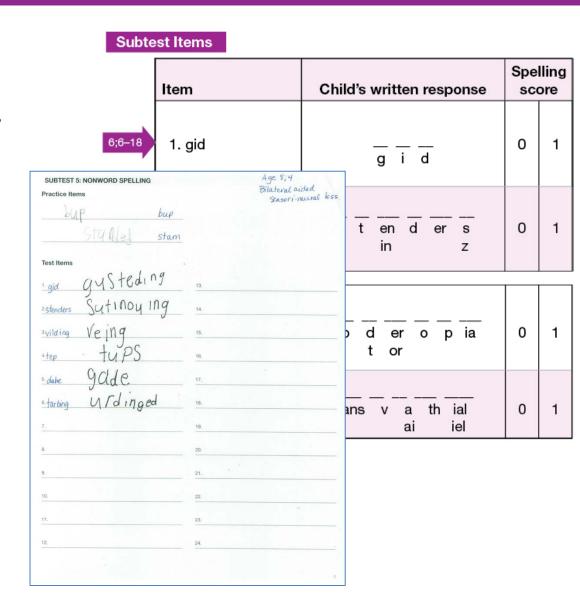
23. proderopia	/prodə-opiə/	0	1
24. transvathial	/t r æ n z v ēī θ i ə l/	0	1

5. Nonword Spelling

Administer immediately after Nonword Repetition.

Say, "I am going to play another voice recording of pretend words. These are the same words you said before. This time your job is to spell the words."

"Remember, these are not real words, but they are <u>like</u> real words..."



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	М	0	1
b. Were the mountains part of the new territories?	Υ	(N)	М	0	1
c. Was the President in charge of choosing the new governors?	(Y)	Ν	М	0	1

7. Reading Comprehension

Administer immediately following Listening Comprehension:

"Now, it's your turn to read some short stories and answer the questions in your Student Book. Circle yes if you are sure the answer is <u>yes</u>. Circle no if you are sure the answer is <u>no</u>. If the story doesn't clearly tell you the answer, circle <u>maybe</u>."

Subtest Items

6;6–11

1. "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? b. Did all of the students take a trip on their summer vacation?		(N)	М	0	1
b. Did all of the students take a trip on their summer vacation?	Υ	Ν	(M)	0	1
c. Did the teacher ask her class to write about their summer vacations?	(Y)	Ν	М	0	1

8. Following Directions

"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."

Subtest Items

	Instructions	tructions Student's response (from Student Response Form)		
6–9	Number 1: Draw a circle around the heart. Go.		0	1
	Number 6: Draw a line above the tree and circle the lock. Go. [Line may be horizontal or vertical.]		0	1
	Number 8: If there is an arrow pointing down, draw a circle under the moon. If not, circle the star. Go.		0	1

9. Delayed Story Retelling

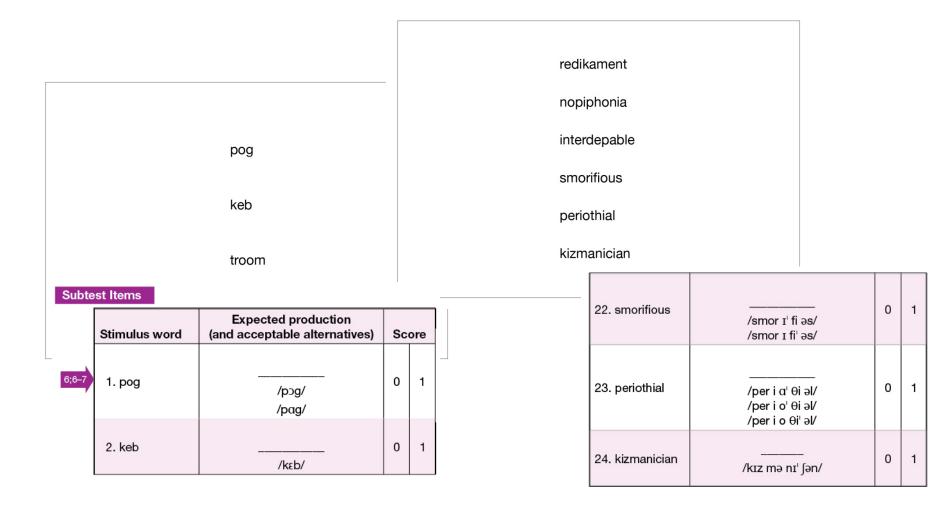
Turn to the age-appropriate story and say, "Remember the story [Tommy the Trickster/The Rubber Raft]? Tell me the story again. Try to remember as much as you can. Start now."

Content Units	Sc	ore
Tommy's (must use proper name to count on first instance)	0	1
2. mother	0	1
3. thought he (Tommy, worried)	0	1
4. was getting fat (bigger, gaining weight)	0	1
5. from eating	0	1
6. too much	0	1
7. junk food (cookies)	0	1
8. so she	0	1
9. stocked (put)	0	1
10. the refrigerator (fridge, icebox)	0	1
11. fruit (healthy foods [only scores once] [not grapes, etc.*])	0	1
12. carrots (carrot sticks, healthy foods, vegetables)	0	1
13. she even put	0	1
14. these things	0	1
15. in his lunchbox (lunch bag, lunch)	0	1
16. but Tommy (he)	0	1
17. was a "fast talker" (figurative meaning)	0	1

Content Units							
18. at school	0	1					
19. he convinced (talked them into, told)	0	1					
20. his friends	0	1					
21. that cookies	0	1					
22. were bad	0	1					
23. for them							
24. then he traded							
25. his fruit (healthy foods [only scores once])	0	1					
26. carrots (carrot sticks, healthy foods)							
27. for cookies							
28. his mother	0	1					
29. didn't know why	0	1					
30. Tommy (he)	0	1					
31. kept gaining weight (getting bigger/fatter)	0	1					
32. when all she had given him	0	1					
33. were healthy foods	0	1					

10. Nonword Reading

Say, "These are pretend words that are not real words, but they are like real words. Your job is to read these words out loud."



11. Reading Fluency

Say, "Here are some facts that tell a story. First, read the title out loud."

"Now read the facts." If the student is an emergent reader, you may say, "Just read the words you know."

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 had on makeup.

She had on a wig.

A ball was on her nose.

It was red.

It was big.

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 wig.

The children were happy.

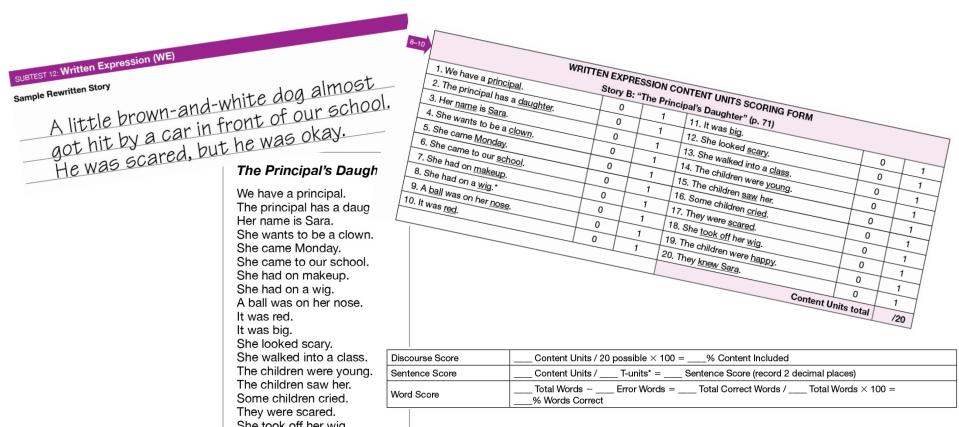
They knew Sara.

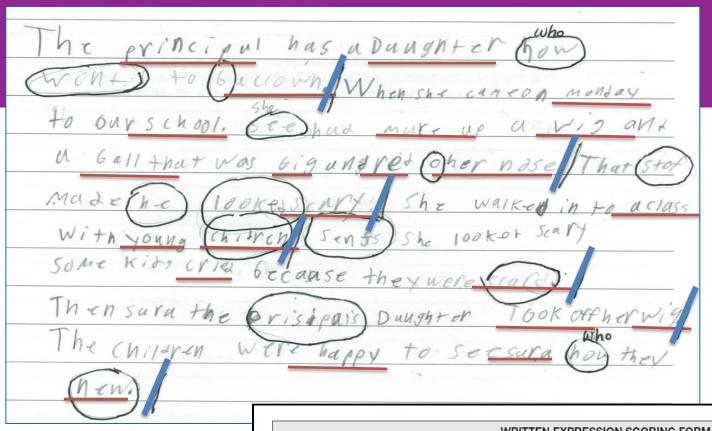
READING FLUENCY SCORING FORM Story B: "The Principal's Daughter" (p. 71) Story elements Score Story elements Score										
Title: The Principal's Daughter	/3	11. It was big.	/3							
1. We have a principal.	/4	12. She looked scary.	/3							
2. The principal has a daughter.	/5	13. She walked into a class.	/5							
3. Her name is Sara.	/4	14. The children were young.	/4							
4. She wants to be a clown.	/6	15. The children saw her.	/4							
5. She came Monday.	/3	16. Some children cried.	/3							
6. She came to our school.	/5	17. They were scared.	/3							
7. She had on makeup.	/4	18. She took off her wig.	/5							
8. She had on a wig.	/5	19. The children were happy.	/4							
9. A ball was on her nose.	/6	20. They knew Sara.	/3							
10. It was red.	/3	Column total	/37							
Column total	/48	Total score	/85							

12. Written Expression – Discourse, Sentence, and Word Scores

"Here's another story. It has facts about a little dog. It's okay, but it sounds choppy. Here is an example of how you could put the facts together to make it sound less choppy and more interesting."

"Now it's your turn to put the facts for your story together in a way that sounds better."





9. A ball was on her nose.

Enter time to administer Subtest 12R:

10. It was red.

Discourse Score: 18/20
content units - 00%

WE-Disc 10

Sentence Score: 18

content/7 T-units =2.57 WE-Sent 11

Word Score: 74/88 wds

without error = 84%

WE-Word 0

WRITT	EN EXPRES	SSION SCORING FORM									
Story B: The Principal's Daughter (ages 8;0–10;11)											
1. We have a <u>principal</u> .	1	11. It was big.									
2. The principal has a <u>daughter</u> .	1	12. She looked scary.									
3. Her <u>name</u> is <u>Sara</u> .	1	13. She walked into a <u>class</u> .	•								
4. She wants to be a <u>clown</u> .	1	14. The children were <u>young</u> .	•								
5. She came Monday.	1	15. The children saw her.	1								
6. She came to our school.	1	16. Some children <u>cried</u> .	•								
7. She had on makeup.	1	17. They were scared.									
8.She had on a <u>wig</u> .		18. She took off her wig.									

19. The children were happy.

Content Units total 18 /20

20. They knew Sara.

13. Social Communication

"This activity is about acting a scene, like from a show on TV or a movie. Your job is to be an actor."

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."

Test Item 4

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? "It is red. It is my favorite color, and I will kiss you if you buy it."

14. Digit Span Forward15. 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."

Scientific evidence for the two dimensions of the quadrant model

	Factor F	Reference	Final
	Stru	ıcture	Communality
	(Semipartia	l Correlations)	Estimate
	Factor 1	Factor 2	
Phonemic Awareness	0.547	0.074	0.550
Non-word Spelling	0.600	0.067	0.642
Non-word Reading	0.734	-0.058	0.786
Reading Fluency	0.406	0.077	0.325
Written Expression Word Score	0.409	0.009	0.267
Story Retelling	-0.052	0.500	0.345
Vocabulary Awareness	0.229	0.472	0.629
Listening Comprehension	0.009	0.548	0.476
Reading Comprehension	0.264	0.420	0.589
Following Directions	0.153	0.409	0.412
Social Communications	0.075	0.476	0.428



TILLS Language Levels X Modalities Model

	Language Level								
Modality	Sound/Word Level	Sentence/Discourse Level							
Listening	1.Vocabulary Awareness (VA) 2.Phonemic Awareness (PA)	6. Listening Comprehension (LC)8. Following directions (FD)							
Speaking	4. Nonword Repetition (NWRep)	3. Story retelling (Comp Qs) (SRcomp) 13. Social communication (SC)							
Reading	10. Nonword Reading (NWRd) 11. Reading Fluency (RF)	7. Reading comprehension (RC)							
Writing	5. Nonword Spelling (NWSp) 12c. Written Exp - word score (WEwd)	12a. Written Exp discourse score(Wedisc)12b. Written Exp sentence combining score (WEscs)							
Memory	14. Digit Span Forward (DSF)15. Digit Span Backward (DSB)	9. Delayed story retelling (DSR)							

Nelson, N. W., Plante, E., Helm-Estabrooks, N., & Hotz, G. (2015). Test of Integrated Language and Literacy Skills™ (TILLS™). Brookes Publishing Co., Inc.

3

Interpret TILLS results for 3 validated purposes

Purpose 1.

Identify language/literacy disorder



Examiner Record Form

CALCULATION OF STUDENT'S AGE								
Test date								
Year:	Month:	Day:						
Birth date								
Year:	Month:	Day:						
Age at test								
Year:	Month:	Day:						
		-						

Student name:	Grade: School:
Scoring Chart	Examiner name:

Step 1: Enter raw scores for all subtests administered.

7 I. Eriter raw scores for all subjests administered.

Step 2: Look up the Subtest Standard Scores and Percentile Ranks for the student's age in the Examiner's Manual Appendix and enter them in the Subtest Scores section.

Step 3: Copy the Standard Scores into the open white cells on the same rows in the Composite of Subtest Standard Scores section.

Step 4: Copy the Standard Scores into the open white cells in the same rows in the age-appropriate column in the Identification Core Scores section.

Step 5: Enter the Sum of the Subtest Standard Scores in all columns where all subtests have been administered.

Step 6: Look up the Sums of Subtest Standard Scores for the student's age in the Examiner's Manual Appendix to find the Standard Scores and Percentile Ranks.

	Subtest	Scores and TIL	LS Total	Com	posite of Subte	est Standard So	Identification Core Scores			
Subtest	Raw Score	Standard Score and TILLS Total	Percentile Rank	Sound/Word Composite Score	Sertence/ Discourse Composite Score	Oral Composite Score	Written Composite Score	Identification Core for 6- to 7-year-olds	Identification Core for 8- to 11-year-olds	Identification Core for 12- to 18-year- olds
1 VA										
2 PA										
3 SR										
4 NWRep										
5 NWSpell*										
6 LC										
7 RC*										
8 FD										
9 DSR										
10 NWRead*										
11 RF*										
12a WE-Disc*										
12b WE-Sent®										
12c WE-Word*										
13 SC										
14 DSF										
15 DSB										
Sum of the Subtest Standard Scores										
Standard Scores of the TILLS Total and Composites										
Percentile Ranks for the TILLS Total and Composites										

Note: For children 6;0-6;5, do not administer the NWSpell, RC, NWRead, RF, and WE subtests.

Identification Core Subtests, Cut Scores, and Sensitivity/Specificity

6-7 year olds

- Core subtests
 - VocabAware
 - PhonemeAw
 - NW Rep
- Sensitivity 84%
- Specificity 84%

8-11 year olds

- Core subtests
 - VocabAware
 - NW Spell
 - NW Read
 - WE-Discourse
- Sensitivity 88%
- Specificity 85%

12-18 year olds

- Core subtests
 - Phoneme Aw
 - NW Spell
 - Rdg Comp
 - ReadingFluency
 - WE-Word
- Sensitivity 86%
- Specificity 90%

SUMMARY AND INTERPRETATION

Identification Chart

Purpose: To identify language and literacy disorders

Step 1: Enter the Sum of the Subtest Standard Scores from the age-appropriate column for the Identification Core Score section from the Scoring Chart of the front cover of this Examiner Record Form.

Step 2: Compare this score to the appropriate age band and cut score. Check the decision box to the right of the table.

Age	Sum of Identification Core	Cut			Decision: Is the Identification Core composite less than the cut score?						
Band	Standard Scores	Score	Sensitivity	Specificity	☐ Yes	□ No					
6–7 years		24	84	84	This score is consistent with	This score is not consistent with					
8-11 years		34	88	85	the presence of a language/ literacy disorder.	the presence of a language/ literacy disorder.					
12-18 years		42	86	90							

Note: The confidence in the diagnostic decision is related to the sensitivity and specificity values for the student's age. Please refer to Chapter 2 of the Technical Manual for more information. Be sure to use the Sum of the identification Core Standard Scores and not the Standard Score of the identification Core Composite for comparison to the cut score.

Purpose 2.

Profile strengths and weaknesses

SUMMARY AND INTERPRETATION

Profile Chart

Purpose: To document patterns of relative strengths and weaknesses

The Profile Chart re-orders the subtests of the TILLS model so that the scores portray a performance profile for the student; take care to enter the scores correctly.

Step 1: For each subtest administered, enter the Standard Score from the Scoring Chart (on the front cover) in the white cell at the top of the corresponding subtest column in the Profile Chart.

Step 2: Mark an X over the dot for the corresponding score in the column.

Step 3: Draw a vertical line from the X to the horizontal line representing the mean in the chart (at standard score 10).

1		Oral Language										Written Language						
		S	ound/W	ord Lev	el	Sentence/Discourse Level						Sound/Word Level				Sent/Disc Level		
		PA	NW Rep	DSF	DSB	VA	LC	FD	SR	DSR	SC	NW Read	RF	NW Spell	WE- Word	RC	WE- Disc	WE- Sant
	Standard Score																	
+2 SD	16-19	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	15	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	14	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
+1 SD	13	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
]	12	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
]	11	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Mean	10	•	•			•	•			•	•		•	•	•	•	•	•
	9	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	8	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
-1 SD	7	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	6	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	5	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
-2 SD	4	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	3	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	2	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
-3 SD	1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
↓]	0	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Confidence Intervals (CI)

	PA	NW Rep	DSF	DSB	VA	LC	FD	SR	DSR	SC	NW Read	RF	NW Spell	WE- Word	RC	WE- Disc	WE- Sant
Upper CI value (+) for% level																	
Standard Score																	
Lower CI value (-) for% level																	

Step 4: In the table above, fill in the student's Standard Score for each subtest administered.

Step 5: Decide whether to use the 68% or the 90% confidence interval; write in the one selected. Look up the corresponding Cl values for the student's age in the Appendix in the Examiner's Manual.

Step 6: Add and subtract these values from each Standard Score, and enter the resulting numbers in the appropriate upper and lower confidence interval value boxes.

Step 7: In the Profile Chart above, draw short horizontal lines through the dots corresponding to the upper and lower CI boundaries.

	TILLS Total	Sound/ Word Composite	Sent/ Disc Composite	Onal Composite	Written Composite	identifica- tion Core
Upper CI value (+) for96 level						
Standard Score						
Lower CI value (-) for% level						

Purpose 3.

Track change over time

Tracking Chart

Purpose: To track changes in language and literacy skills over time

Step 1: Enter the Standard Score obtained at Test Time 1 (from an earlier administration of the TILLS) and Test Time 2 (from the current administration) for each subtest administered.

Step 2: Subtract standard scores earned at Time 1 from scores earned at Time 2 to calculate differences.

Step 3: Compare the absolute values of the differences (i.e., ignoring whether they are positive or negative) to the True Change Interval values. (These represent values for the 68% confidence interval; values for the 90% confidence interval are reported in the Appendix of the Examiner's Manual.)

Step 4: If the absolute value of the difference for a subtest is larger than the True Change Interval, enter "yes" (or Y) under Change Decision. If not, enter "no" (or N). If yes, add a sign (+ or -) to indicate whether the difference is positive or negative.

DATE OF TEST	AGE OF STUDENT
Test Time 2:	yrsmos
Test Time 1:	yrsmos
Time between tests:	(minimum 6 months)

			Oral	Language			Written Language							
	Sub- test	Standard Score Time 2	Standard Score Time 1	Difference	True Change Interval	Change Decision (yes/no)	Sub- test	Standard Score Time 2	Standard Score Time 1	Difference	True Change Interval	Change Decision (yes/no)		
ivel	PA				2		NW Read				1			
Sound/Word Level	NW Rep				2		RF				2			
W/pur	DSF				2		NW Spell				1			
Soc	DSB				2		WE- Word				2			
	VA				1		RC				2			
le.	LC				2		WE- Disc				1			
sc Level	FD				2		WE- Sent				1			
Sent/Disc	SR				2									
Š	DSR				2									
	SC				2									

Key: PA = Phonemic Awareness, NWRep = Nonword Repetition, DSF = Digit Span Forward, DSB = Digit Span Backward, VA = Vocabulary Awareness, LC = Listening Comprehension, FD = Foliowing Directions, SR = Story Reteiling, DSR = Delayed Story Reteiling, SC = Social Communication, MWRead = Nonword Reading, RF = Reading Fluency, NWSpell = Nonword Spelling, WE-Word = Written Expression-Word Score, RC = Reading Comprehension, WE-Disc = Written Expression-Discourse Score, WE-Sent = Written Expression-Score

4

Consider teacher, parent, and student input on the SLS

Consider teacher, parent, and student input on the SLS

Multiple sources Co-norming Student Rating Scale

Student Language Scale





Nickola Wolf Nelson, Ph.D., CCC-SLP Barbara Howes, Ph.D., M.S.W. Michele A. Anderson, Ph.D., CCC-SLP

to gather multiple perspe	ctives on a student's language/literacy ab	ilities and oth	ner skills.					
Student's name:					Grade:		Date:	
Person responding:	☐ General education teacher ☐ Student		l education /guardian	teacher	0	ther:		
	ther students of the same age, ow good this student is at	circle the	Not good					Very good
1. Understanding	school vocabulary words		1	2	3	4 5	6	5 7
2. Using school vo	ocabulary words when talking		1	2	3	4 5	6	5 7
3. Figuring out ne	w words when reading		1	2	3	4 5	6	5 7
4. Spelling words	correctly when writing		1	2	3	4 5	6	5 7
5. Understanding	a story when listening		1	2	3	4 5	6	5 7
6. Telling a story t	hat makes sense		1	2	3	4 5	6	5 7
7. Understanding	a story when reading		1	2	3	4 5	6	5 7
8. Writing a story	that makes sense		1	2	3	4 5	6	5 7
9. Following spok	en directions		1	2	3	4 5	6	5 7
10. Being organize	d about schoolwork		1	2	3	4 5	6	5 7
11. Paying attentio	n in school		1	2	3	4 5	6	5 7
12. Interacting soc	ially with other students		1	2	3	4 5	6	5 7
☐ Art (drawing/paint	ings that you think are easiest fo ting) □ Dance □ Music □ Me ng □ Other:	echanical		□Math	□ Socia	I □ Listen	ning 🔲	Talking
☐ Art (drawing/paint	ings that you think are hardest fo ting) □ Dance □ Music □ Me ng □ Other:	echanical		□Math	□ Socia	I □ Listen	ning 🔲	Talking
What one thing do y	ou think is most important to hel	p this stud	lent do bet	ter at sch	ool?			

This Student Language Scale may be used with the Test of Integrated Language and Literacy Skills™, other assessment tests, or as a stand-alone measure

TILLS™ Student Language Scale (SLS), by Nickola Woll Nelson, Barbara Howes, and Michele A. Anderson.

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Teacher's ratings on the first 8 items--

Are 2 or more ratings <5?

→ High sensitivity
93% of 69 students with LLD identified accurately as having problems

Are all (but 1) ratings >5?

→ High specificity
90% of 206 students with NL identified accurately as not having problems



5

Collaborate with others to decide what to do next

9 year old Third Grade Girl



- History of difficulty learning to read and write
- Tested for special ed in Grade 3 (not with the TILLS), but did not qualify
- Classroom teacher reported strength in math "if story problems are read aloud"

Gen Ed. Teacher SLS in 3rd Grade

Person responding	General Ed. Teacher	☐ Special Ex	d. Teache		□ Other:				
	☐ Student	☐ Parent/Gu	andlan						
Student's research ID#		_Student's grad	e laval: _	3	Today's date:	Jā	anua	ry	
Compared with oti number to show ho	her students of the same a w good this student is at	ige, circle the	Not good						Very
1. Understanding s	school vocabulary words		1	2	(3)	4	- 5	6	7
2. Using school vo	cabulary words when talking	9	1	2	(3)	4	- 5	.6	7
3. Figuring out new	r words when reading		1	(2	3	4	5		7
4. Spelling words of	correctly when writing		(1)	2	3	4	5	6	7
5. Understanding a	story when listening		1	2	3	4	5	(8)	7
6. Telling a story th	at makes sense		1	2	3	. 4	5	(6)	7
7. Understanding a	story when reading		1	2	3	(1)	5	6	7
8. Writing a story ti	nat makes sense		1	2	3	(4)	5	- 6	7
9. Following spoke	n directions		1	2	3	4	(5)	6	7
10. Being organized	about school work		1.	2	3	4	6	(6)	7
11. Paying attention	in school		1	2	3	4	5	(8)	7
12. Interacting social	illy with other students		1	2	3	4	5 "	(6)	7
Deading Writing Comments: AS A Structure Please check the thing Art (drawing/pajotr	Shie 15 a gooden f bud	Still st for this stude	P.e. nt to do	n &	has evere	S#	ugg	Les Takin	9
words	struggles as well								
ADTS: At ofirtudinents of the 1	think is most important to help I STUGOUT C UNITES US TILLS Blanched batter Version are posses of administering TILLS for validation of	ched by appreight and	must out by	No work	per elistrate and to a	all the state of	manufacture C	CACL	100

Parent SLS in 3rd Grade

Person reaponding:	General Ed. Teacher	☐ Special E	d. Teacher		Other:				
	Student	MParent/Gr	uardian						
			7	,		J	anua	arv	
Student's research ID#:		Student's grad	de level: ⊻	To	day's date:	_		,	
	er students of the same a	age, circle the	Not good						Very
1. Understanding s	chool vocabulary words		1	2	3	4	5	6	7
2. Using school voo	cabulary words when talkin	9	1	2	3	4	- 5	6	7
3. Figuring out new	words when reading		1	(2)	3	4	5	6	7
4. Spelling words o	orrectly when writing		1	2	3	4	5	6	7
5. Understanding a	story when listening		1	2	3	4	(3)	.6	7
6. Telling a story the	at makes sense		1	2	3	4	5	(6)	7
7. Understanding a	story when reading		1	2	3	4	5	6	7
8. Writing a story th	nat makes sense		1	2	3	4		6	7
9. Following spoker	n directions		1	2	3	4	5	6	
10. Being organized	about school work		1	2	3	4	(5)	6	7
11. Paying attention	in school		1	2	3	4	5		7
12. Interacting social	lly with other students		1	2	3	4	5		7
	gsthat you think are easieng). ⊡10 ance ⊡, Music I g □ Other:				th OSo	cial 🗀	Listening	E3 Talkir	g
	gs that you think are hards	☐ Mechanical			th □Sox	cial 🗆	Listening	□Talkir	g
	g □Other:								
TReading DWriting	g Other:		better at s	chool?					

9 year old girl

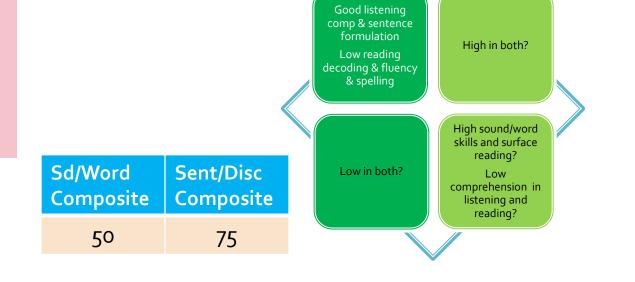


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	'egaugnat	PA	NW Rep	DSF	DSB	VA	LC	FD	SR	DSR	SC	NW Read	RF	NW Spell	WE- Word	RC	WE- Disc	WE- Sent
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	12	•	•	•	•	•	•			•	•	•	•	•	•	•	•	•
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2 SD	4		•	•		0	•	•	•	•	•	1	-	X		•	•	•
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3 SD	1	•				•	•	•	•	•			•	./	•	•	•	•
1	0		•			•	•	•				1	X	/	•	•		•

TILLS scores for 9 year old girl

Age Band	Identification Composite Standard Score	Cut Score	Sensitivity	Specificity	Decision: Is the identification composite <u>less</u> than the cut score? Yes
6-7 years		24	84	84	This score is consistent with the presence of a language/ literacy disorder.
8-11 years	22	34	88	85	□ No
12-18 years		42	86	90	This score is not consistent with the presence of a language/ literacy disorder.

- Core subtests
 - Vocab Aware
 - NW Spell
 - NW Read
 - WE-Discourse



A Little More than One Year Later

Gen Ed. Teacher SLS in 4th Grade

needs interventions in all areas to help her be successful

Parent	SLS	in 4	th C	irac	de

all items. If you have questions, call Dr. Anderson at 269-387-8446 or Person responding: "Degeneral Ed. Yaacher Special I			Other:_				-	ad items. If you have questions, call Dr. Anderson at 289-387-8446 or Person responsing: General Ed. Teacher Special I			Other:			
Student Parent/G		yra To	day's date:	N	1ay			☐ Student ☐ Parent/G Student's research ID# Student's gra	· ·	Today	r's date:	Ma	y	
Compared with other students of the same age, circle the number to show how good this student is at	Not good						Vary good	Compared with other students of the same age, circle the number to show how good this student is at	Not good					Ver god
Understanding school vocabulary words	1	2	3	4	5	6	7	Understanding school vocabulary words	1	2	3	₫ 5	6	7
2. Using school vocabulary words when talking	0	2	3	4	5	6	7	Using school vocabulary words when talking	1	2	3	9 5	6	_
3. Figuring out new words when reading	0	2	3	4	5	6	7	Figuring out new words when reading	1	2		4 5	6	_
4. Spelling words correctly when writing	0	2	3	- 4	5	8	7	Spelling words correctly when writing	1	2	_	4 5	- 6	
5. Understanding a story when listening	.1	2	3	(1)	5	6	7	5. Understanding a story when listening	1	2	3	4 6	6	
6. Telling a story that makes sense	1	2	3	(4)	5	6	7	6. Telling a story that makes sense	1	2	3	4 6		_
7. Understanding a story when reading	1	2	(3)	4	.5	4	7	Understanding a story when reading	1	2		3 5	-	-
8. Writing a story that makes sense	. 1	(2)	3	4	5	6	7	Writing a story that makes sense	1	2	-	(b) 5		-
9. Following spoken directions	1	2	3	4	6	6	7	Following spoken directions	1	2	3	4 5	G C	
10. Being organized about school work	1	2	3	(1)	5	6	7	10. Being organized about school work	1	2	3	4 5	6	- 1
11. Paying attention in school	1	2	3	4	(6)	8	7	11. Paying attention in school	1	2	3	4 5	6	6
12. Interacting socially with other students	1	2	3	4	(3)	6	7	12. Interacting socially with other students	3.	*	0	4 0	0	- (
Please check the things that you think are easiest for this studied of the studies of the studie	dent to do	: s □Ma	ath ty∕Soc	iai 🛦	istening	₫Tal	ing	Please check the things that you think are easiest for this stu- Art (drawing/peinting)	☐ Sports	ŮMath	⊠ Soci	d ∐Listen	ing ETa	uking
Please check the things that you think are hardest for this stu Art (drawing/peinting) Comments:	dent to do	o: is by Ma	ath □Sox	## [] I	istening	□ Talk	ing	Please check the things that you think are hardest for this stu- Art (drawing/painting)	dent to do:	□Math	□Soci	i □ Listen	ing □Ta	alking
What one thing do you think is most important to help this student of	o better ut	school?	ull area	s to	help	her	be	What one thing do you think is most important to help this student of Giving extra time for			+ 1	writ	ma	

10 year old 5th Grade Boy



- Hx of prematurity; born at 26 weeks, in hospital for 5 months
- Primary eligibility speech/language impairment on basis of language
- Goals in multiple areas of language and math
 - Verbal expression
 - Language content
 - Reading comprehension
 - Math calculation
 - Math reasoning

10 year old boy

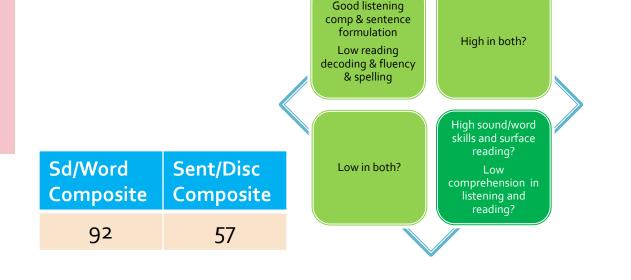


	1980	E REV IN	N FUNE S	and threat	A/HOUR	Oral La	nguage				Land Land		e iouit.	Writt	en Lang	uage		
-		S	ound/W	ord Lev	rel		Sente	ence/Dis	scourse	Level		S	ound/W	ord Lev	el	Sen	t/Disc L	evel
	\specgral	PA	NW Rep	DSF	DSB	VA	LC	FD	SR	DSR	SC	NW Read	RF	NW Spell	WE- Word	RC	WE- Disc	WE- Sent
	Standard Score	10	12	7	10	4	3	5	3	6	0	4	11	7	10	3	12	5
+2 SD	16–19	Sq. • Sq.	38.00	•	•	•	•	•	•	•	•	5:80 - 530	100	• •	0 a • 1 0 l	•	•	•
	15	•	•	•	•	•	•		•	•	•		•	•	•	•	•	•
	14	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•
+1 SD	13	•	•	•	•	•		•		•	•	•	•	•	•		•	•
	12	1	X	•	1	•	•	•	•	•		•	-		•	•	X	•
SORE	11	/ •	}	•	1	•		•	•	•	•	./	X	•		•		•
Mean	10	X	-	1	X		1	1	1	1	1	1		1	X	•	-	1
	9	•	•	1	•		1 }	1	1	1			•	1	•	h	•	†
factions	8	•	•	4	./		1	1	+	1			•	1	1./	•	•	+ -
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-2 SD	4	•	•	•		X	1	•		•	1	X	•		•		•	•
	3			•		•	X	•	*	•		0	•	•	•	×	•	•
vgrient.	2	•	•	•	•	•			•	•	1	•	•	•		55	•	•
-3 SD	1		non•Bit			•	•	-	•	•	M			•		•	•	•
	0								•		X	•	•			•	•	•

TILLS scores for 10 year old boy

Age Band	Identification Composite Standard Score	Cut Score	Sensitivity	Specificity	Decision: Is the identification composite <u>less</u> than the cut score? Yes
6-7 years		24	84	84	This score is consistent with the presence of a language/ literacy disorder.
8-11 years	27	34	88	85	□ No
12-18 years		42	86	90	This score is not consistent with the presence of a language/ literacy disorder.

- Core subtests
 - Vocab Aware
 - NW Spell
 - NW Read
 - WE-Discourse



14 year old 10th Grade Boy

- Hispanic; had been learning English since birth
- History of speech/language impairment on basis of language
 - Syntax goals
 - Morphology goals
- SLI primary and SLD secondary on IEP

14 year old boy



	1910	a Jujur da	U TEMP S	aut differen	UHROD B	Oral La	nguage	,	134				0003	Writt	en Lang	juage		
10		S	ound/W	ord Lev	el		Sente	ence/Di	scourse	Level		S	ound/W	ord Lev	el	Sen	t/Disc I	evel
	/esparagnal	PA	NW Rep	DSF	DSB	VA	LC	FD	SR	DSR	SC	NW Read	RF	NW Spell	WE- Word	RC	WE- Disc	WE- Sent
	Standard Score	0	0	4	8	4	5	2	7	8	4	0	0	0	2	0	9	6
+2 SD	16–19	ties.	00.00	- 10 · 100	an • n a	•	•	•	•	•	•	000000	100 · 100	0.00	1	•	•	•
	15	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	14			•	•	•	•	•	•	•	•		•	•	•	•	•	•
+1 SD	13	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	12	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•
SOLU.	11	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•
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bullings	8		}		*		-	1	X	*	1		+		+		•	
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	0	(X	X				•					×	×	×).	×	•	

Gen Ed. Teacher SLS in 10th Grade

Student's research ID#:	Student	□Parent/Gi	12000	10_Tod	lay's date		ne		
Compared with othe number to show how		e same age, circle the it is at	Not good						Very good
1. Understanding so	hool vocabulary	words	1	2	(D)	4	.5	6	7
2. Using school voc	abulary words wi	nen talking	1	0	3	4	5	6	7
3. Figuring out new	words when read	ing	0	2	3	4	.6	8	7
4. Spelling words co	nectly when writ	ing	1	0	3	4	.5	6	7
5. Understanding a	story when listen	ing	1	8	3	0	5	6	7
6. Telling a story that	t makes sense		1	2	3	4	5	10	7
7. Understanding a	story when readi	10	1	2	0	4	5	6	7
B. Writing a story the	at makes sense		1	2	0	4	- 5	6	7
9. Following spoken	directions		t	2	(3)	4	5	ė.	7
10. Being organized a	about school wor	k	0	2	3	4	. 6	6	7
11. Paying attention i	n school		1	(2)	3	4	5	6	7
12. Interacting social	y with other stud	ents	1	2	3	0	5	0	7
☐ Reading ☐ Writing Comments:	Other:	Music Mechanical			n jalso	ocial ⊡t	istening	Йтак	ing
Art (drawing/painting	CTC I TO BE INVOCATION IN	are hardest for this stud Music			h □Sc	ooal Di	istening	□Talk	ing
Comments:									

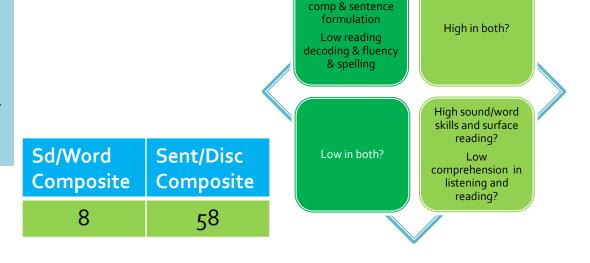
Parent SLS in 10th Grade

Person reaponding:	□ General Ed. Teacher □ Student	□Special (ØParant/G	uardian	-مالي	Other:_	Jυ	ne		
Student's research ID#		Student's gra	de level:	O Today	y's date:				
	ner students of the same of y good this student is at	age, circle the	Not good						Ver
1. Understanding s	chool vocabulary words		1	2	(3)	4	5	6	7
2. Using school vo	cabulary words when talkin	g	1	2	(3)	4	.5	6	7
3. Figuring out new	words when reading		1	(2)	3	4	5	6	7
4. Spelling words o	correctly when writing		1	2 (3	4	5	6	7
5. Understanding a	story when listening		1	2	(3)	4	5	в	7
6. Telling a story th	at makes sense		1	2	(3)	4	5	6	7
7. Understanding a	story when reading		1	1	3	4	6	θ	7
8. Writing a story If	nat makes sense		1	(2)	3	4	. 5	6	7
9. Following spake	n directions		1	.2	6)	4	5	6	7
10. Being organized	about school work		1	2	3	4	(5)	6	7
11. Paying attention	in school		1	2	3	4	(3)	В	7
THE RESERVE AND ADDRESS OF THE PARTY OF THE	dly with other students		1	2	3	(4)	5	6	7
	ngk that you think are easie ng) □ Dance □ Music g □ Other:				□ 8oc	sial □L	istering	□Talking	1
□ Art (drawing/paimi	ngs that you think are harding) □ Dance □ Music g □ Other:				□Soc	sal □L	istering	□Talking	1
Comments:									
What one thing do you	think is most important to help	o this student do	beter at s	thou?					

TILLS scores

Age Band	Identification Composite Standard Score	Cut Score	Sensitivity	Specificity	Is the identification composite <u>less</u> than the cut score? Yes
6-7 years		24	84	84	This score is consistent with the presence of a language/ literacy disorder.
8-11 years		34	88	85	□ No
12-18 years	2	42	86	90	This score is not consistent with the presence of a language/ literacy disorder.

- Core subtests
 - Phoneme Aw
 - NW Spelling
 - Reading Comp
 - Reading Fluency
 - WE-Word



Good listening

Take-Home Points



- Conceptualize language/literacy model with sound/word and sentence/discourse levels
- Consider what each TILLS subtest tells you
- Interpret TILLS results using validated methods
 - Identification core: Identify disorder
 - Composite scores: Relationship across language levels
 - Change scores: As a measure of change relative to norms
- Consider teacher, parent, and student input on the SLS
- Collaborate to individualize intervention
 - Sound/word level: Teach word structure skills using direct and explicit methods
 - Sentence/discourse level: Teach comprehension and formulation skills using language of the curriculum

Comments & Questions



Additional Questions

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For More Information on TILLS

- www.brookespublishing.com/tills
- www.facebook.com/tillstest
- www.pinterest.com/brookespubco/tills



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