

# Assessment of Language: Language Sample Analysis

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# Housekeeping – Meeting Resources

- In the [Participant Folder](#) you will find the google slide deck as well as other relevant resources for the meeting.
- Must read: “Assessing Functional Language in School-Aged Children Using Language Sample Analysis” by Heilmann et al. 2020

# New Rule Effective August 1, 2021

Individualized Education Program (IEP) teams must use the new criteria to identify a speech or language impairment for referrals for special education dated on or after August 01, 2021.

- [Summary of Changes for SLI Rule](#)
- [Revisions to SLI Identification](#)
- [Videos of SLI Criteria Overview](#)
- [SLI Criteria: Digging Deeper Webinar Videos](#)
- [WI DPI Speech or Language Impairment Assessment Tools page](#)

# New Rule Effective August 1, 2021


**DEFINITION PI 11.36(5)(a), Wisconsin Administrative Code Speech or Language Impairment means: An impairment of speech or sound production, voice, fluency, or language that adversely affects educational performance or social, emotional, or vocational development.**

## Language Impairment

Following consideration of the child's age, culture, language background, and dialect, the child demonstrates a language impairment in the area of language form, content or use, as evidenced through an observation in a natural environment and by measurement of at least two of the following:

- Language sample analysis.
- Dynamic assessment.
- Developmental scales or another criterion-referenced assessment.
- Significant discrepancy from typical language skills on a norm-referenced assessment of comprehensive language.

# Today's Learning Objectives

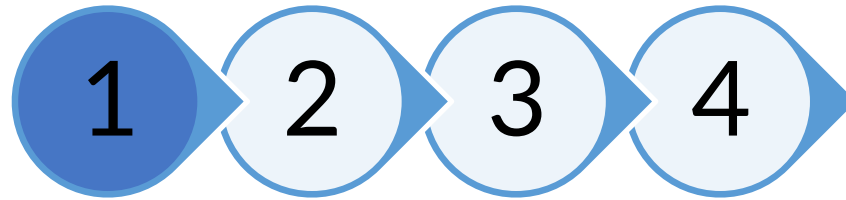
- **Participants will recognize the benefits of language sampling within comprehensive assessments**
  - **Participants will understand how rubrics are a feasible language sample method**
  - **Participants will recognize the added value of transcribed language samples**
  - **Participants will establish a strategy for increasing their use of language sample analysis**
- 

# John's Disclosures

- No financial relationship with any content
- Have completed research on Systematic Analysis of Language Transcripts (SALT)

# Learning Objective #1


Participants will recognize the benefits of language sampling within comprehensive assessments



# Planning Assessment

**“No single measure or assessment is used as the sole criterion”**

**IDEA 34 CFR §300.304 (b)(2)**





# Comprehensive Assessment Model

## 4 Part Model for Comprehensive Assessment

<b>Academic Activities:</b> <ul style="list-style-type: none"><li>● Artifact analysis</li><li>● Curriculum-based assessment</li><li>● Observations in school (natural) settings</li><li>● Educational records</li></ul>	<b>Speech-Language Probes:</b> <ul style="list-style-type: none"><li>● Case history</li><li>● Interviews</li><li>● Language/Narrative samples</li><li>● Stimulability</li><li>● Dynamic assessment</li><li>● Play-based assessment</li></ul>
<b>Contextualized Tests:</b> <ul style="list-style-type: none"><li>● Norm-referenced measures of academic achievement</li><li>● Curriculum benchmarks</li></ul>	<b>Decontextualized Tests:</b> <ul style="list-style-type: none"><li>● Norm-referenced speech-language tests (parsed skills: articulation, semantics, syntax, morphology, fluency, etc.)</li></ul>

# Converging Evidence Framework



Castilla-Earls, Bedore,  
Fabiano-Smith, Pruitt-Lord,  
Rojas, Peña and Restrepo  
2020)

# Assessment Framework

Questions to consider when gathering assessment data:

- Is there a significant discrepancy?
  - Is there an educational impact?
- 

# Is there a significant discrepancy?



## Considerations for Language Impairment

This worksheet can be used by IEP teams in considering whether a student meets criteria for a speech or language impairment. For each item, circle the item that best represents the student's performance. Students must demonstrate the presence of a delay in communication skills that also has an **educational impact** in order to meet the criteria for a speech or language impairment in Wisconsin. When a valid comparison to a normative sample cannot be made or a student has significant impairments, consider completion of the [Functional Communication Summary](#) worksheet.

	<b>Academic Activities</b> (e.g., writing samples, reading running record, observations in natural settings, records)	<b>Academic Tests and Measurements</b> (e.g., districtwide and statewide assessments, curriculum benchmarks)	<b>Speech-Language Pathology Probes</b> (e.g., language sample, intelligibility, stimulability, dynamic assessment, play-based assessment, interviews, case history)	<b>Speech-Language Pathology Norm-Referenced Tests and Measurements</b> (e.g., norm-referenced assessments with appropriate sensitivity and specificity)
<b>No Apparent Impact</b>	Performs similarly to peers in most areas	Performs similarly to peers in most areas	May indicate differences from Standard American English Demonstrates improvements during dynamic assessment	1 or 2 composite scores* at or above: • mean to -1 SD • > 85 SS # • >17th percentile
<b>Minimal Impact</b>	Evidence of struggle with one or more areas when compared to peers Evidence of occasional difficulty with 'meta' skills	Evidence of struggle with one or more areas when compared to peers	May indicate differences from Standard American English Demonstrates improvements during dynamic assessment Occasional difficulty with pragmatic, semantic or syntax- morphological skills	1 or 2 composite scores* documenting: • -1 to -1.5SD • 84 to 77 SS # • 16th-7th percentile
<b>Moderate Impact</b>	Evidence of struggle in most areas when compared to peers Evidence of difficulty with 'meta' skills	Evidence of struggle in most areas when compared to peers	Demonstrates limited improvement during dynamic assessment Frequent difficulty with pragmatic, semantic or syntax- morphological skills	1 or 2 composite scores* documenting: • -1.5 to -2 SD • 76-70 SS # • 6th -3rd percentile
<b>Substantial Impact</b>	Evidence of very limited ability in most areas Evidence limited or absence of 'meta' skills	Evidence of very limited ability in most areas	Demonstrates very limited improvement during dynamic assessment Extensive difficulty with pragmatic, semantic or syntax- morphological skills	1 or 2 composite scores* documenting: • -2 or greater SD • 69 or below SS # • below 3rd percentile


\*These scores should be composite scores from the full battery of subtests, not individual subtest scores.

August 2021


The individual test's cut score should be considered during the process of determining eligibility. This example assumes a mean of 100 and standard deviation of 15 points.

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# What's wrong with norm-referenced tests?

- In many cases.....nothing!
  - Can be biased for
    - Students who speak multiple languages
    - Students who speak different dialects
    - Students who are not familiar with standardized tests
- 

# Advantages of Language Sampling

- **Universal nature of discourse**
  - **Naturalistic tasks**
  - **Can accommodate a range of languages and dialects**
- 

# Why do we care about impact?

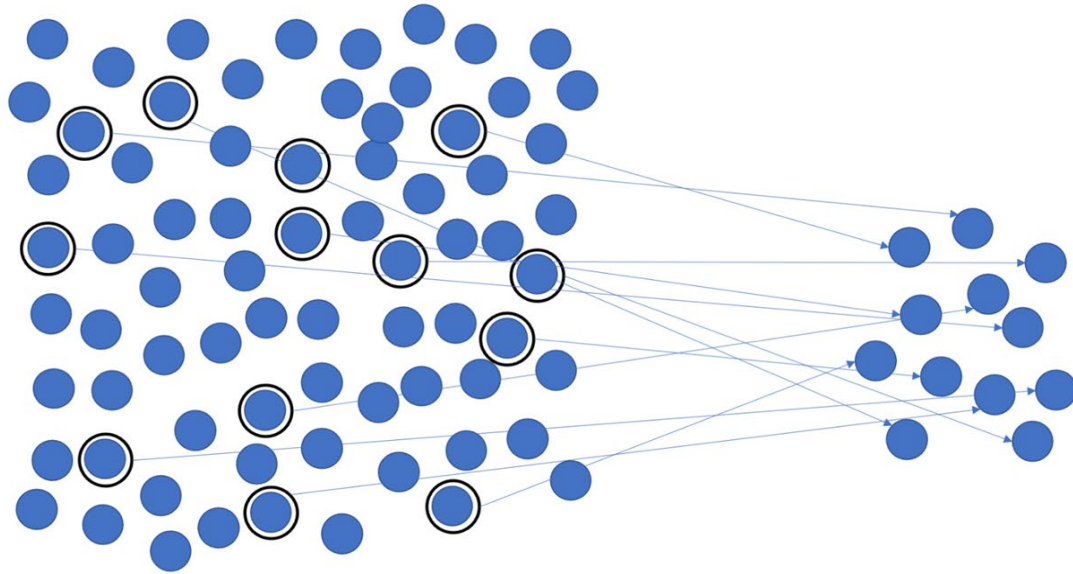
- Requirement in Individuals with Disabilities Education Act (IDEA)
  - Part of Wisconsin special education eligibility requirement
  - *Impact is where we find meaningful treatment objectives!*
- 

# Language Sampling & Educational Impact






# Sampling Meaningful Communication




# Examples of Educational Impact

In the following slides:


- Examples of educational tasks
  - Related language sample tasks
- 

# Conversation

Participate in conversations about kindergarten topics;  
listening to others and taking turns about the topic;  
continuing through multiple exchanges (*CCSS.ELA Literacy.SL.K  
Comprehension and Collaboration:*)



# Conversation: Educational Impact

- Limited participation at classroom centers
  - Student's "voice" not heard due to limited engagement with teacher
  - Student cannot share point of view with classroom community
- 


# Narrative

**Tell a story, or recount an experience with appropriate facts, and relevant descriptive details, speaking clearly, at an understandable pace.**

*(CCSS.ELALiteracy.SL.4)*



# Narrative: Educational Impact


- **Decreased engagement in story time**
  - **Unable to comprehend or describe what student is reading**
  - **Unable to write about personal experiences**
- 

# Special Importance of Narrative



# Expository

**Present information, findings, and supporting evidence clearly, concisely, and logically such that listeners can follow the line of reasoning (CCSS.ELA.Literacy.SL.9-10)**





# Expository: Educational Impact

- **Presentations disorganized and have limited impact**
- **Cannot discuss strategy for a classroom competition**
- **Difficulty comprehending and discussing concepts in science, math, and social studies**

# Significant Discrepancy & Educational Impact



## Considerations for Language Impairment

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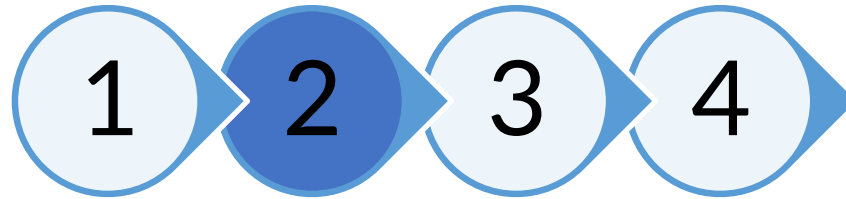
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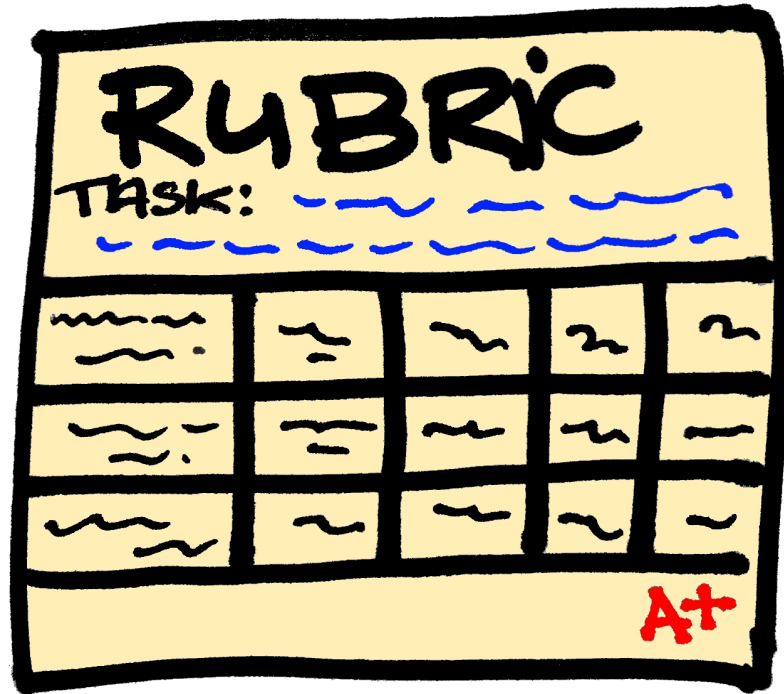
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# Learning Objective #2

Participants will understand how rubrics are a feasible language sample method



# Rubrics



# Where do we find them?

## In our schools

Name \_\_\_\_\_

### 3rd Grade Informative/Explanatory Writing Rubric

	1 Needs Support	2 Approaching Standard	3 Meets Standard	4 Exceeds Standard
<b>Introduction</b>	Does not introduce the topic.	Attempts to introduce the topic.	Introduces the topic.	Introduces the topic in an interesting way.
<b>Content</b>	Does not use facts, definitions, and details.	Attempts to use facts, definitions, and details.	Uses facts, definitions, and details.	Uses many facts, definitions, and details.
<b>Linking Words</b>	Does not use linking words.	Attempts to use linking words correctly.	Uses linking words correctly.	Uses many linking words correctly to connect ideas within categories of information.
<b>Closing</b>	Does not provide a closing.	Attempts to provide a closing.	Provides a closing.	Provides a strong closing.
<b>Mechanics</b>	Does not use capitalization, punctuation, and spelling correctly.	Attempts to use capitalization, punctuation, and spelling correctly.	Uses most capitalization, punctuation, and spelling correctly.	Uses capitalization, punctuation, and spelling correctly.

## From Researchers & Publishers

Examiner says, "Thanks for listening. Now you tell me that story." After child appears to be done, examiner says, "Are you finished?" Prompts (up to 3x), "It's OK. Just do your best." and/or "I can't help, but you can just tell the parts you remember."

STORY GRAMMAR (SG)		2 POINTS		1 POINT		0		LANGUAGE COMPLEXITY (LC)		EPISODE (E)	
Character	Rachel / any name	2	a girl / the girl	1	0	Word	# Times Used	P+A		P+A+C	
Setting	playing with balloon at store / holding a balloon in store	2	playing with balloon / store / got a balloon	1	0	then	1	P+A+C		P+A+C+E	
Problem	her balloon floated away / it flew up in the sky	2 [P]	balloon gone / flew away	1	0	because	1 2 3	P+A+C		P+A+C+E	
Feeling	sad / mad / angry	2	didn't like it / cried	1	0	when	1 2 3	P+A+C+E		E SUBTOTAL	
Attempt	asked mom for another one / asked, "Can I get another one?"	2 [A]	asked mom / wanted one	1	0	after	1 2 3	LC SUBTOTAL		OTHER TARGETS	
Consequence	bought another balloon	2 [C]	got another one	1	0	target	# Times Used	LISTENING RETELL SCORE (SG+LC+E)			
Ending	held onto the balloon / it did not float away	2 [E]	held it / did not float away	1	0	✓		PERSONAL GENERATION			
SG SUBTOTAL						/14		PERSONAL GENERATION			

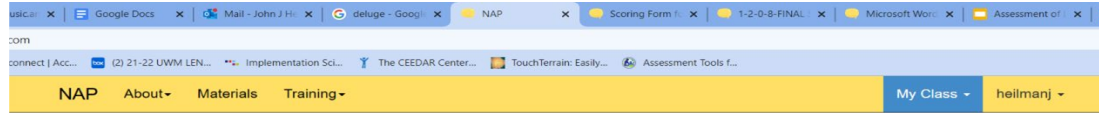
  

STORY QUESTIONS (SQ)		1x		0		VOCABULARY USE (VU)			
Who was this story about?		2	1	0	TARGET WORDS		OTHER POSSIBLE WORDS		
Where was Rachel in the beginning of the story?		2	1	0	rose	1	dilted, flew, floated		
Why was Rachel sad?		2	1	0	big	1	glant, huge, large		
What did they do to fix the problem?		2	1	0	swifly	1	quickly, suddenly, rapidly		
How did the story end?		2	1	0	Notes:				
What will Rachel do the next time she goes outside with a balloon?		2	1	0	STORY QUESTIONS SCORE (SQ)				
				/12		VOCABULARY SCORE (VU)			
				/14					

(Turn on audio recorder). Examiner says, "In this story, Rachel lost her balloon. Tell me a story about a time when you lost something." If the child doesn't tell a story, encourage the child (up to 3x) to produce a thematically related story. Score the story using the NLM Flow Chart (see Examiner's Manual for details).

# Narrative Assessment Protocol

<http://www.narrativeassessment.com>



## Narrative Assessment Protocol



The NAP was developed to provide a brief and cost-effective narrative assessment tool for use with young children (pre-k through 2nd grade) that is easy to administer and score.

This tool is designed to be used as a routine part of language screening and assessment by education professionals, clinicians, and other allied professionals.

The NAP, once scored, provides a comprehensive summary of a child's narrative skills with information about how often the child uses each of 20 different narrative skills.

**The NAP includes the following materials:**

- A series of four wordless picture books that were developed specifically for this project to elicit narratives from children
- Administration directions
- A scoring form

**Become a certified NAP user by completing the following steps:**

1. Watch the 5 training videos.
2. Watch videos of the NAP being administered and scored.
3. Practice scoring several NAP videos and compare your scores to the master scores.
4. Complete the certification scoring test by viewing and scoring 3 videos. You must achieve 80% correct scoring across all three videos to be certified to use the NAP.

# NAP Administration Instructions

## NAP Administration Instructions

### Introduce the task:

**We are going to look at a storybook together. It is a special storybook that doesn't have any words in it. It only has pictures. First I am going to tell you a make-believe story using the pictures in the book. The second time, you will tell me a make-believe story using the pictures in the book.**

### Tell the story to the child:

If the child interrupts direct the child's attention back to the story and continue reading.

### Elicit a narrative from the child:

Hand the book to the child and say:

**Now it is your turn to tell me a story using the pictures in this book. Make the story as long as you can. You can open the book and turn the pages by yourself. Go ahead!**

If the child is hesitant to tell a story, or tells you "I don't know how to read," you may prompt the child by saying: (Only prompt 2 times to get the story started)

- **You can open the book. It doesn't have any words in it, so you can use the pictures to tell me the story.**
- **I just told you a story about the pictures. Now it is your turn to tell me a story about the pictures. Go ahead and open up the book.**
- **There is no right or wrong way to tell the story. You can make your story sound like mine or it can be different.**

During the story re-telling, you may use one of the three prompts below (*may prompt one time per page*):

- **Tell me about this page or**
- **What about this page? or**
- **You can use the pictures to help.**

Once the child stops talking, do not include any other prompts. Use the above prompts only if the child does not say anything about a page.

If the child asks a question such as "What was his name?" or "What happened on this page?" the assessor may answer by saying "**This is your story so you decide**".

*In the event that the child does not respond after the maximum number of prompts are given, the assessor should silently count three beats (i.e. "one Mississippi, two Mississippi, three Mississippi"). If the child has still not responded at the end of the third beat the assessor should turn the page and follow the above procedure to try to elicit the narrative. Note that the child did not respond on the Narrative Collection Sheet.*

At the end of the book, say:

**Thank you for telling me such a great story!**

---

## NAP Administration Instructions

### When to Stop:

If the child doesn't provide any narrative after 6 pages, stop assessing and score as "No narrative".

Score as "Refusal" if...

1. The child refuses to leave their classroom to do the assessment.
2. The child decides to leave the assessment before the assessor finishes reading the story.
3. The child listens to the story but does not open the NAP book upon prompting.

# NAP Administration Instructions continued



## Book #1 Raccoon Makes Lemonade

- 1) One hot, summer day, Rachel Raccoon and her three best friends were playing soccer. The sun was beating down, and everyone was getting hot and sweaty. Soon, everyone was thirsty.
- 2) Suddenly, Rachel had an idea. "Let's have some lemonade!", she exclaimed.
- 3) While her friends finished the game, Rachel dashed inside and swung open the fridge. There, on the top shelf, was a pitcher of lemonade.
- 4) Rachel reached for the lemonade, but it was too high. She couldn't reach it! "How am I going to get that down?" she asked herself.
- 5) Rachel was feeling frustrated, until she spotted a step stool under the counter. "Aha!" she thought. Rachel grabbed the heavy stool and put it in front of the fridge. Thud!
- 6) Rachel climbed on top of the stool, and carefully removed the pitcher from the fridge.
- 7) Rachel took a big gulp and tasted the drink.
- 8) "Bleck!", she cried, with puckered lips. "We can't drink that, it's way too sour!" But Rachel had a plan.
- 9) First, Rachel got the sugar bag from the cupboard, and then she put three heaping spoonfuls into the lemonade.
- 10) Rachel tried the lemonade a second time, and this time it tasted yummy and sweet! "Perfect!", she said happily.
- 11) Very carefully, Rachel carried the pitcher outside so she could share it with her friends. She announced that the lemonade was ready. "Yay!", everyone jumped and cheered.
- 12) They quickly ran over for their drinks, but there was something missing. No cups! How were they going to drink the lemonade?



# NAP Rubric

## NAP Form Book 1: Raccoon Makes Lemonade

Child ID: \_\_\_\_\_ Teacher Name: \_\_\_\_\_ Date: \_\_\_\_\_

Item	Score				Example(s)
	No	Yes			
Conventional Opening	No	Yes			Once upon a time; One day
Character Reference	0	1	2	3+	Rachel; Rachel Raccoon (Exceptions: the raccoon, friends)
Temporal Ordering	0	1	2	3+	First; soon; after; while; a second time; finally; suddenly (Exception: then)
Emotion Reference	0	1	2	3+	Frustrated; happy; silly
Elongations	0	1	2	3+	Loooonng
Similes and Metaphors	0	1	2	3+	Quick as a flash
Gratuitous Terms	0	1	2	3+	Really liked the lemonade; very carefully; way too sour (Exception: too)
Time Reference	0	1	2	3+	One spring day; It was morning; it was time to ride
Tier Two Verb	0	1	2	3+	>7 letters: Galloped; returned; grinning; announced; carrying
Tier Two Adverb	0	1	2	3+	>7 letters: Excitedly; carefully; suddenly
Tier Two Adjective	0	1	2	3+	>7 letters: Beautiful; frustrated; puckered lips; refreshing lemonade
Interrogative "wh" Questions	0	1	2	3+	How am I going to get that down?
Conjoined Adverbial Phrase	0	1	2	3+	Carried the pitcher slowly and carefully
Elaborated Noun Phrase	0	1	2	3+	three, best friends; three, heaping spoonfuls; sweet, refreshing lemonade (Exceptions: possessives such as his/her, articles such as a/the)
Sub-Goal	0	1	2	3+	1- Opens fridge to see pitcher/ runs inside for lemonade 2- Takes drink (took a sip) 3- Carries pitcher outside to friends
Sub-Problem	0	1	2	3+	1- Pitcher too high (too far up) 2- Too sour (doesn't taste right) 3- No cups
Sub-Solution	0	1	2	3+	1- Gets step stool 2- Adds sugar (something to change flavor) 3- Runs inside for cups
Sub-Resolution	0	1	2	3+	1- Gets pitcher (reaches it) 2- Tasted yummy (sweet) 3- Returns with cups
Conventional Ending	No	Yes			The end

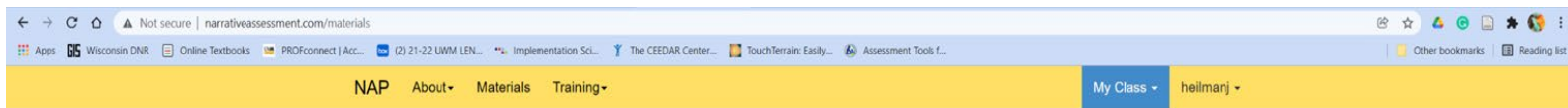
# NAP Rubric Example

## NAP Form Book 1: Raccoon Makes Lemonade

Child ID: \_\_\_\_\_ Teacher Name: \_\_\_\_\_ Date: \_\_\_\_\_

Item	Score				Example(s)
	No	Yes			
<b>Title</b>					<b>Raccoon makes lemonade</b>
<b>Conventional Opening</b>	No	Yes			<b>Once upon a time; One day</b>
<b>Character Reference</b>	0	1	2	3+	<b>Rachel; Rachel Raccoon</b> <b>(Exceptions: the raccoon, friends)</b>
<b>Temporal Ordering</b>	0	1	2	3+	<b>First; soon; after; while; a second time; finally; suddenly</b> <b>(Exception: then)</b>
<b>Emotion Reference</b>	0	1	2	3+	<b>Frustrated; happy; silly</b>
<b>Elongations</b>	0	1	2	3+	<b>Loooong</b>
<b>Similes and Metaphors</b>	0	1	2	3+	<b>Quick as a flash</b>
<b>Conjoined Adverbial Phrase</b>	0	1	2	3+	<b>Carried the pitcher slowly and carefully</b>
<b>Elaborated Noun Phrase</b>	0	1	2	3+	<b>three, best friends; three, heaping spoonfuls; sweet, refreshing lemonade</b> <b>(Exceptions: possessives such as his/her, articles such as a/the)</b>
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# NAP Website



## Books and Materials

### NAP Administration Directions

#### Raccoon Makes Lemonade

Script  
NAP Form  
Picture Book

#### Wolf Cleans Bedroom

Script  
NAP Form  
Picture Book

#### Tiger Goes to Bed

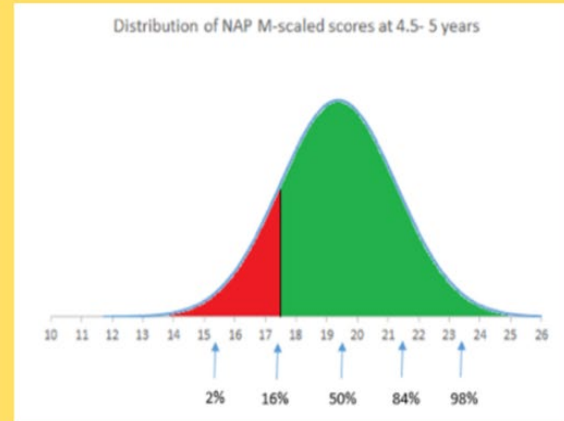
#### Rabbit Goes on a Bike Ride

# Interpretation of Performance

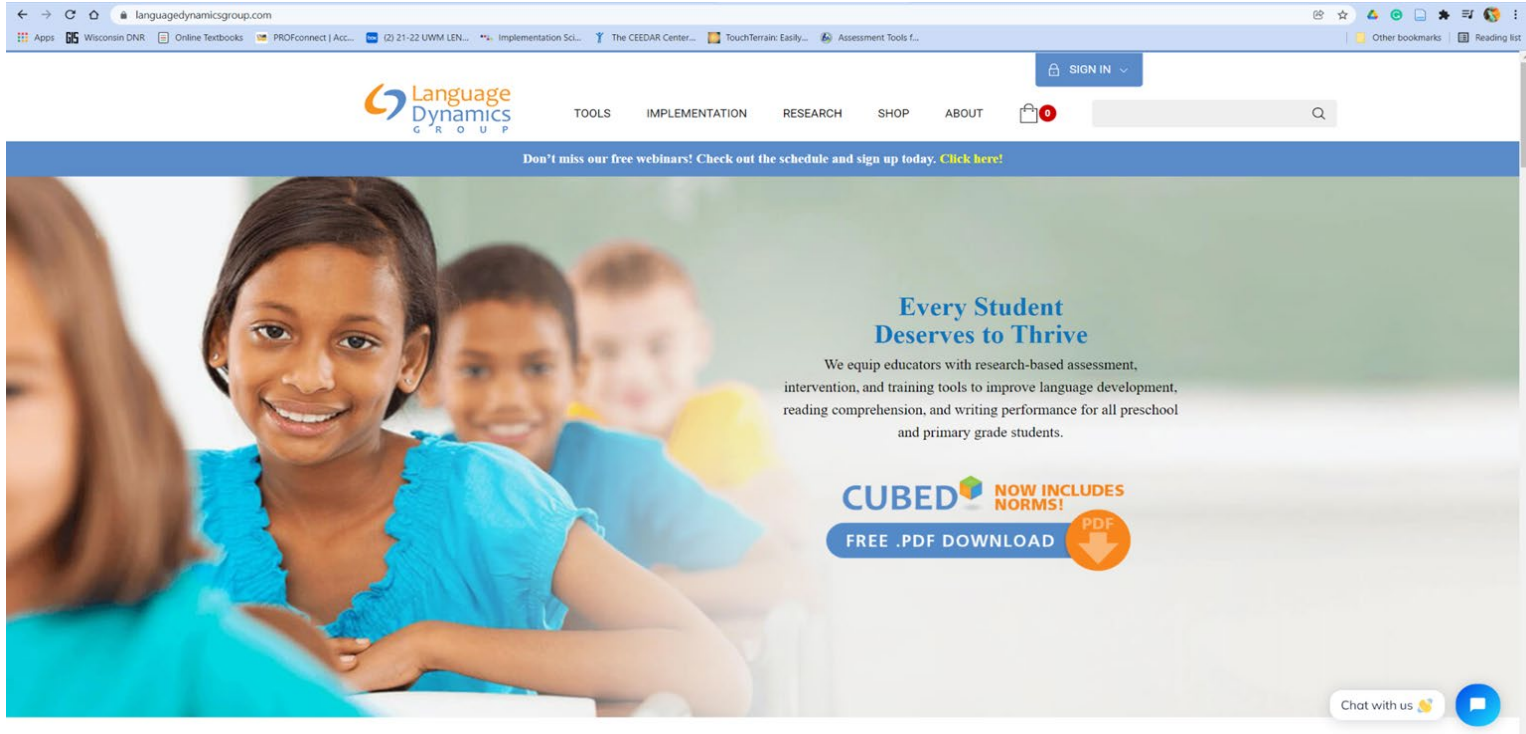
- **Benchmarks for 3 - 7-year-old students**

Typical NAP Scores for Children at 4 years, 6 months to 5 years, 0 months:

Mean= 19.37  
Standard Deviation= 1.91  
Range= 14.18 to 23.31  
Cut-point (16th percentile): 17.46



# CUBED: Narrative Language Measures



languagegroup.com

Language Dynamics GROUP

TOOLS IMPLEMENTATION RESEARCH SHOP ABOUT


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# Example

NLM Listening: Preschool

WINTER: Story 1



NLM LISTENING

Preschool Benchmark: STORY 1 WINTER

Child/ID \_\_\_\_\_ Audio File \_\_\_\_\_ Examiner \_\_\_\_\_ Date \_\_\_\_\_

LISTENING  
RETELL

Examiner says, "I'm going to tell you a story. Please listen carefully. When I'm done, you are going to tell me the same story. Are you ready?" Examiner reads the story word for word at a moderate pace with normal inflection.

Pictures  No Pictures

Yesterday Rachel was at a store. She was holding a balloon. Rachel's mom bought it for her because she had been good. When they walked outside, the big balloon swiftly rose up in the sky. Rachel was sad because her balloon floated away. She said to her mom, "Oh no! Can I get another balloon?" Then her mom bought her another balloon. Rachel held onto this one. It did not float away.

# Example Rubric

Examiner says, "Thanks for listening. Now you tell me that story." After child appears to be done, examiner says, "Are you finished?" Prompts (up to 3x), "It's OK. Just do your best." and/or "I can't help, but you can just tell the parts you remember."

STORY GRAMMAR (SG) 2 POINTS			1 POINT			0		
LISTENING RETELL	<b>Character</b>	Rachel / any name	2	a girl / the girl	1	0		
	<b>Setting</b>	playing with balloon at store / holding a balloon in store	2	playing with balloon / store / got a balloon	1	0		
	<b>Problem</b>	her balloon floated away / it flew up in the sky	2 [P]	balloon gone / flew away	1	0		
	<b>Feeling</b>	sad / mad / angry	2	didn't like it / cried	1	0		
	<b>Attempt</b>	asked mom for another one / asked, "Can I get another one?"	2 [A]	asked mom / wanted one	1	0		
	<b>Consequence</b>	bought another balloon	2 [C]	got another one	1	0		
	<b>Ending</b>	held onto the balloon / it did not float away	2 [E]	held it / did not float away	1	0		
				<b>SG SUBTOTAL</b>			<b>/14</b>	

LANGUAGE COMPLEXITY (LC)			
Word	#Times Used		
then	1		
because	1	2	3
when	1	2	3
after	1	2	3
<b>LC SUBTOTAL</b> <b>/9</b>			

EPISODE (E) (from green 2 point SG)		
P+A or P+C or A+C		2
P+C+E or P+A+E		3
P+A+C		4
P+A+C+E		5
<b>E SUBTOTAL</b>		<b>/5</b>

OTHER TARGETS	
Target	#Times Used
✓	
✓	

LISTENING RETELL SCORE (SG+LC+E)	
<b>/28</b>	


STORY QUESTIONS (SQ) ↻1x			
Who was this story about?		2	1 0
Where was Rachel in the beginning of the story?		2	1 0
Why was Rachel sad?		2	1 0
What did they do to fix the problem?		2	1 0
How did the story end?		2	1 0
What will Rachel do the next time she goes outside with a balloon?		2	1 0
<b>STORY QUESTIONS SCORE (SQ)</b>		<b>/12</b>	

VOCABULARY USE (VU)			
Circle 1 for every modifier or less common word the child uses			
TARGET WORDS		OTHER POSSIBLE WORDS	
rose	1	drifted, flew, floated	1
big	1	giant, huge, large	1
swiftly	1	quickly, suddenly, rapidly	1
Notes:			
<b>VOCABULARY SCORE (VU)</b>		<b>/6</b>	

## PERSONAL GENERATION


(Turn on audio recorder). Examiner says, "In this story, Rachel lost her balloon. Tell me a story about a time when you lost something." If the child doesn't tell a story, encourage the child (up to 3x) to produce a thematically related story. Score the story using the NLM Flow Chart (see Examiner's Manual for details).

# CUBED: Narrative Language Measures

- **Benchmark data for PreK - 3rd Grade**
  - **Multiple alternate forms available for progress monitoring and dynamic assessment**
- 



# Is there anything other than narrative?

- **Expository: Technical descriptions**
  - **Persuasion: Motivate someone to act or change point of view**
- 

# SALT Rubrics

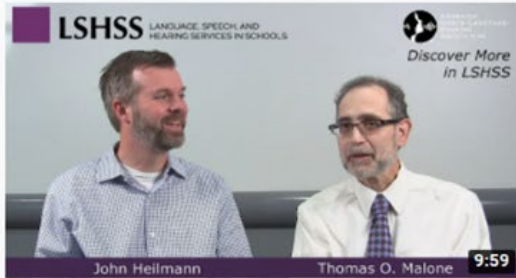
SALT Rubric:

<https://www.saltsoftware.com/products/elicitation-materials>

The screenshot shows the homepage of SALT Software. At the top, a dark blue header contains the tagline "Making Language Sampling Easier!". Below this is a white navigation bar with a "Get Started >" button on the left, the SALT SOFTWARE logo in the center, and a search bar on the right. A secondary navigation menu lists: Company, Products, Training, Transcription, Resources, Downloads, Ordering, Support, and Blog. The main content area features a large blue banner with the text "MAKING LANGUAGE SAMPLING EASIER" and "Elicit | Transcribe | Analyze". To the right of the text is a photograph of a young woman and an older woman sitting at a desk, looking at a book together. Below the banner is a row of four light blue icons representing different software features.

# Clinician-developed Materials

Did you mean: [John Heilmann](#) [Tom Malone](#)



## The Rules of the Game: A Database of Expository Language Samples - J. Heilmann & T. Malone

424 views · 6 years ago



American Speech-Language-Hearing Association

An interview with [John Heilmann](#), University of Wisconsin–Milwaukee, and [Thomas O. Malone](#), School District of Brown Deer, ...



# Expository

## Planning Sheet

- Clear expectations
- Standardized
- elicitation

**What to Talk About  
When Explaining a Game or Sport**

Points	What's Covered	Notes
Object	What you have to do to win	
Preparations	Playing Area and Setup Equipment and Materials What players do to get ready	
Start	How the contest begins, including who goes first	
Course of Play	What happens during a team or player's turn, including any special plays, positions, or roles, both offensive and defensive	
Rules	Major rules, including penalties for violations	
Scoring	Different ways to score, including point values	
Duration	How long the contest lasts, including how it ends and tie breaking procedures	
Strategies	What smart players do to win, both offensively and defensively	

Please use the reverse of this page for an optional diagram or graphic organizer, or for additional notes.

## Expository Scoring Scheme (ESS) Rubric

Characteristic	Proficient (5)	Emerging (3)	Minimal/Immature (1)
<b>Object</b>	Full description of the main objective	Mention of the main objective	Mention of winner but no or limited description how that is determined <b>OR</b> Description of another aspect of the contest, such as strategy or scoring
<b>Preparations</b>	<b>1) Playing Area</b> Labels place and provides details about shape & layout <b>AND/OR</b> <b>2) Equipment</b> Labels items and provides detailed description, including function <b>AND/OR</b> <b>3) Player Preparations</b> Provides detailed description	<b>1) Playing Area</b> Labels place and provides limited details about shape & layout <b>OR</b> <b>2) Equipment</b> Labels items with limited description <b>OR</b> <b>3) Player Preparations</b> Provides some description	<b>1) Playing Area</b> Labels place but no details about shape & layout <b>OR</b> <b>2) Equipment</b> Labels items with no description <b>OR</b> <b>3) Player Preparations</b> Provides limited description
<b>Start</b>	Describes initial situation and how play begins	Describes initial situation or how play begins, but not both	Limited description of the initial situation or how play begins
<b>Course of Play</b>	Detailed description of: A unit of play <b>AND/OR</b> Major roles <b>AND/OR</b> Major plays	Some description of: A unit of play	Limited description of: A unit of play
<b>Rules</b>	Clear statement of major rules and, when applicable, consequences for violations	Mentions r applicable violations b	
<b>Scoring</b>	Full description of ways to score and point values	Incomplete score i	
<b>Duration</b>	Clear description of: How long the contest lasts, including, when applicable, the units in which duration is measured <b>AND/OR</b> How the contest ends <b>AND/OR</b> Tie breaking procedures	Some How long How ti Tie brei	
<b>Strategy</b>	Full description of some ways to win the contest that are not required by the rules but are what competent players do	Mention of: contest that i rules but a i	
<b>Terminology</b>	Terms of game are clearly defined whenever introduced	Some terms o consist	
<b>Cohesion</b>	Topics follow a logical order <b>AND</b> Topics are completely covered before moving on to another; <b>AND</b> Smooth transitions between topics	Topics fo Topics are before m Smooth tran	

**Scoring:** Each characteristic receives a scaled score 0-5. Proficient characteristics=5, Em undefined, use judgment. Significant factual errors reduce the score for that topic. Score of the characteristic scores. Highest score=50.

**A score of 0 is given for student errors,** e.g., not covering topic, explaining a different ga abandoned utterances).

**A score of NA (non-applicable) is given for mechanical/examiner/operator errors,** e.g., interruptions), examiner quitting before student does, examiner not following protocol, ended questions or prompts.

# Expository Rubric

## Expository Scoring Scheme (ESS) Rubric

Characteristic	Proficient (5)	Emerging (3)	Minimal/Immature (1)
<b>Object</b>	Full description of the main objective	Mention of the main objective	Mention of winner but no or limited description how that is determined <b>OR</b> Description of another aspect of the contest, such as strategy or scoring
<b>Preparations</b>	<b>1) Playing Area</b> Labels place and provides details about shape & layout <b>AND/OR</b> <b>2) Equipment</b> Labels items and provides detailed description, including function <b>AND/OR</b> <b>3) Player Preparations</b> Provides detailed description	<b>1) Playing Area</b> Labels place and provides limited details about shape & layout <b>OR</b> <b>2) Equipment</b> Labels items with limited description <b>OR</b> <b>3) Player Preparations</b> Provides some description	<b>1) Playing Area</b> Labels place but no details about shape & layout <b>OR</b> <b>2) Equipment</b> Labels items with no description <b>OR</b> <b>3) Player Preparations</b> Provides limited description
<b>Start</b>	Describes initial situation and how play begins	Describes initial situation or how play begins, but not both	Limited description of the initial situation or how play begins

# Persuasion

Name \_\_\_\_\_ Date \_\_\_\_\_

I am talking to my \_\_\_\_\_ *i.e., principal, boss, government official*

## What to Talk about When Trying to Persuade Someone

Points	What's Covered	Notes
Issue ID and Desired Change	<p>What rule or situation do you want changed?</p> <p>What would you change it to?</p>	
Supporting Reasons	<p>What facts or values or evidence helps your side?</p> <p>Be sure to include how your change would help or benefit the listener or people the listener cares about.</p>	
Counter Arguments -- Other Point of View	<p>What are some good reasons on the other side?</p>	
Response to Counter Arguments	<p>What can you say to knock down or weaken the reasons on the other side?</p> <p>What reasons on the other side can you agree with, either in whole or in part?</p>	
Compromises	<p>If you can't get your way 100%, what deals would be acceptable so each side wins a little?</p>	
Conclusion	<p>Briefly sum up your position: What do you want?</p> <p>Why do you want it?</p> <p>What are the first steps needed to make the change happen?</p>	

Please use the reverse of this page for an optional diagram or graphic organizer, or for additional notes.

# Persuasion Rubric

<b>Supporting Reasons</b>	<ul style="list-style-type: none"> <li>Reason(s) are comprehensive; include detail</li> <li>Benefit(s) to others are clearly understood</li> </ul>	<ul style="list-style-type: none"> <li>One or more reasons are offered support desired change</li> <li>Benefit(s) to others are unclear or omitted</li> </ul>
<b>Other Point of View (Counter Arguments)</b>	<ul style="list-style-type: none"> <li>Other point(s) of view are clearly explained; include detail</li> <li>Includes language to support or refute other point of view</li> </ul>	<ul style="list-style-type: none"> <li>Other point(s) of view are acknowledged</li> <li>OR</li> <li>Dismissive of other point(s) of view</li> </ul>
<b>Compromises</b>	<ul style="list-style-type: none"> <li>Includes language, with some detail, to support or refute compromising</li> </ul>	<ul style="list-style-type: none"> <li>Compromise(s) are acknowledged</li> <li>OR</li> <li>Dismissive of compromising</li> </ul>

## PSS Scoring Rubric

Characteristic	Proficient/Advanced (5)	Satisfactory/Adequate (3)	Minimal/Immature (1)
<b>Issue Identification and Desired Change</b>	<ul style="list-style-type: none"> <li>Existing rule or situation is clearly understood before supporting reasons are stated</li> <li>Desired change is clearly stated</li> </ul>	<ul style="list-style-type: none"> <li>Existing rule or situation can be discerned; may require shared knowledge</li> <li>Desired change can be discerned</li> </ul>	<ul style="list-style-type: none"> <li>Speaker launches into persuasion with no mention of existing rule or situation</li> <li>Desired change is difficult to determine</li> </ul>
<b>Supporting Reasons</b>	<ul style="list-style-type: none"> <li>Reason(s) are comprehensive; include detail</li> <li>Benefit(s) to others are clearly understood</li> </ul>	<ul style="list-style-type: none"> <li>One or more reasons are offered to support desired change</li> <li>Benefit(s) to others are unclear or omitted</li> </ul>	<ul style="list-style-type: none"> <li>Reason(s) are confusing or vague</li> <li>Significant/obvious reason(s) are not stated</li> <li>Reason(s) are not plausible; do not support change</li> </ul>
<b>Other Point of View (Counter Arguments)</b>	<ul style="list-style-type: none"> <li>Other point(s) of view are clearly explained; include detail</li> <li>Includes language to support or refute other point of view</li> </ul>	<ul style="list-style-type: none"> <li>Other point(s) of view are acknowledged</li> <li>OR</li> <li>Dismissive of other point(s) of view</li> </ul>	<ul style="list-style-type: none"> <li>Other point(s) of view are unclear or omitted</li> </ul>
<b>Compromises</b>	<ul style="list-style-type: none"> <li>Includes language, with some detail, to support or refute compromising</li> </ul>	<ul style="list-style-type: none"> <li>Compromise(s) are acknowledged</li> <li>OR</li> <li>Dismissive of compromising</li> </ul>	<ul style="list-style-type: none"> <li>Compromises are unclear or omitted</li> </ul>
<b>Conclusion</b>	<ul style="list-style-type: none"> <li>Desired change is clearly restated/summarized</li> <li>Arguments are clearly restated/summarized</li> <li>Concludes using language such as, "to conclude", "therefore", "and so", "in sum", etc.</li> <li>First step(s) for change are mentioned</li> </ul>	<ul style="list-style-type: none"> <li>Desired change is restated</li> <li>One or more supporting reasons are restated</li> <li>Ending is inferred and/or lacks transition to conclusion, e.g., "And that's all", "that's it", "I'm done"</li> </ul>	<ul style="list-style-type: none"> <li>Summary statement(s) are omitted</li> <li>Unclear to listener that the persuasion task is completed</li> </ul>
<b>Cohesion</b>	<ul style="list-style-type: none"> <li>Points are fully covered before moving on to another</li> <li>Transitions between points are smooth/clear using mature language</li> <li>Referents are clear</li> <li>Listener can easily follow the argument</li> </ul>	<ul style="list-style-type: none"> <li>Point are covered, but lack organization</li> <li>Transitions between points are acceptable</li> <li>Referencing is adequate</li> <li>Listener can follow the argument with some effort</li> </ul>	<ul style="list-style-type: none"> <li>Points are not fully covered before moving onto another</li> <li>Abrupt transitions between points</li> <li>Referents are unclear, hard to follow</li> <li>Argument is difficult to follow</li> </ul>
<b>Effectiveness</b>	<ul style="list-style-type: none"> <li>Argument is extremely compelling</li> <li>Argument is entirely plausible</li> <li>Argument is well stated</li> <li>Mature language is used</li> <li>Minimal errors of syntax/form</li> <li>Supported points well</li> <li>Speaker's delivery is passionate</li> <li>Speaker engages listener</li> </ul>	<ul style="list-style-type: none"> <li>Argument is compelling</li> <li>Argument is plausible</li> <li>Argument requires little or no clarification</li> <li>Acceptable syntax/form</li> <li>Speaker's delivery is clear; not necessarily passionate</li> <li>Effort to persuade is evident</li> <li>Speaker makes some attempt to engage listener</li> </ul>	<ul style="list-style-type: none"> <li>Argument is minimally or not compelling</li> <li>Argument is not plausible</li> <li>Language is unclear</li> <li>Errors of syntax/form may be prevalent</li> <li>Speaker's delivery lacks effort; not passionate</li> <li>Speaker makes no attempt to engage listener</li> <li>Speaker uses inappropriate/immature tone</li> </ul>

**Scoring:** Each characteristic receives a scaled score 0-5. Proficient/Advanced characteristics=5, Satisfactory/Adequate=3, Minimal/Immature=1. Scores in between, 2 and 4, are undefined, use judgment. Significant factual errors reduce the score for that topic. Scores of 0, NA are defined below. A composite is scored by adding the total of the characteristic scores. Highest score=35.

**A score of 0 is given for student errors,** e.g., not covering topic, not completing/refusing task, student unintelligible, abandoned utterances.

**A score of NA (non-applicable) is given for mechanical/examiner/operator errors,** e.g., interference from background noise, issues with recording (cut-offs, interruptions), examiner not following protocol, examiner asking overly specific or leading questions rather than open-ended questions or prompts.


# Will

- In Kindergarten, suspect language disorder
- CELF-P Standard Score = 77
- Suspect data were valid
- Difficulty on all subtests. For example,
  - Repeating sentences
  - Production of inflectional morphemes



# Will: Value Added of Language Sampling

**Demonstration of how different types of language sampling add value to the assessment of Will**



# Narrative Assessment Protocol

- Provides basic descriptions of the pictures
- No development of plot

Sub-Goal	0	1	2	3+	1- Opens fridge to see pitcher/ runs inside for lemonade
					2- Takes drink (took a sip)
					3- Carries pitcher outside to friends
Sub-Problem	0	1	2	3+	1- Pitcher too high (too far up)
					2- Too sour (doesn't taste right)
					3- No cups
Sub-Solution	0	1	2	3+	1- Gets step stool
					2- Adds sugar (something to change flavor)
					3- Runs inside for cups
Sub-Resolution	0	1	2	3+	1- Gets pitcher (reaches it)
					2- Tasted yummy (sweet)
					3- Returns with cups

# NAP: Value Added


- **Provides confirmation of CELF-P data**
- **Documentation of educational impact**
- **Identification of meaningful treatment objective (plot development in stories)**

# NAP: Additional Value

- Opens door to conversations with teachers
- Have objective progress monitoring tool

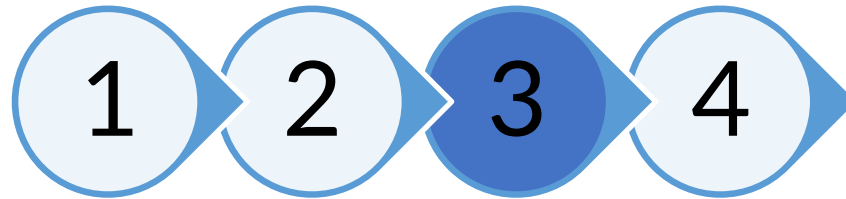
Sub-Goal	0	1	2	3+	1- Opens fridge to see pitcher/ runs inside for lemonade 2- Takes drink (took a sip) 3- Carries pitcher outside to friends
Sub-Problem	0	1	2	3+	1- Pitcher too high (too far up) 2- Too sour (doesn't taste right) 3- No cups
Sub-Solution	0	1	2	3+	1- Gets step stool 2- Adds sugar (something to change flavor) 3- Runs inside for cups
Sub-Resolution	0	1	2	3+	1- Gets pitcher (reaches it) 2- Tasted yummy (sweet) 3- Returns with cups

# Using Rubrics: Final Thoughts

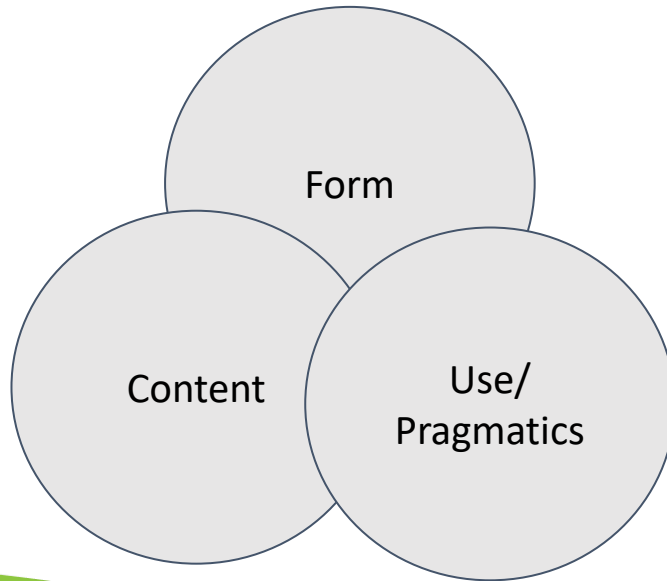
- Can capture different types of discourse
  - Highly standardized, yet naturalistic
  - Feasible, yet requires training & practice (as does any assessment)
- 

# Learning Objective #3

Participants will recognize the added value of transcribed language samples




# Dimensions of Language



# Language Use and Pragmatics

## Discourse organization skills

- Staying on topic
  - Telling a well-organized story
  - Providing a well-formed argument
- 




# Narrative Organization Skills


## Story grammar

- **Setting**
- **Problem**
- **Attempts**
- **Resolution**


# Other Discourse-Level Measures

- Topic maintenance
  - Use of key discourse features (e.g., strategies; responses to counter-points)
  - Impact on the listener
- 

# Transcription Expands Language Dimensions

- **Macrostructure:** Overall discourse organization; ability to relate to concepts across utterances
  - **Microstructure:** Language elements found within utterances
- 

# Language Form (Grammar & Syntax)

- **Assembling sentences**
  - **Tense & morphology**
  - **Embedding clauses**
- 
- The bottom of the slide features a decorative graphic consisting of three overlapping, wavy horizontal bands. From top to bottom, the colors are light green, blue, and dark blue. The bands curve downwards from left to right, creating a sense of movement and depth.


# Form Examples

“We played *ed* at the park”

“The girl *who was wearing a hat* played at the park.”

“*When setting up the experiment*, you must calibrate the printer *so that it will be accurate.*”

# Language Content (Vocabulary & Meaning)

- Using accurate & precise words
  - Finding the words when needed
- 

# Content Examples

Elaborated noun phrases

- The *frightened little puppy*

Mental state words

Adverbs

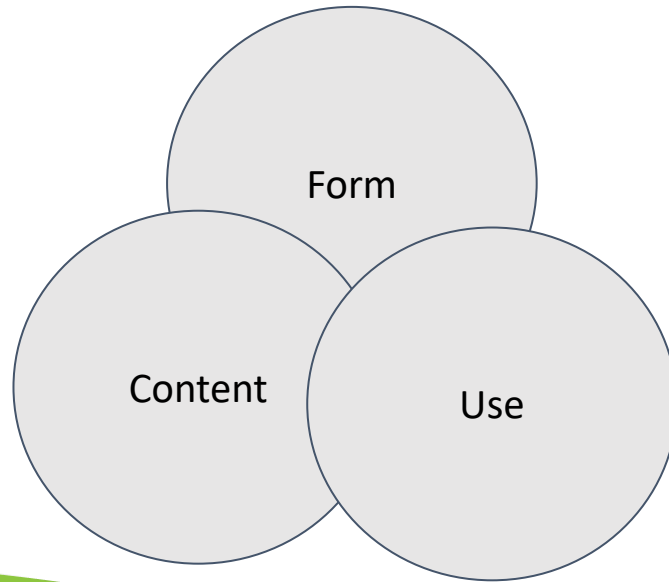
Technical terminology

# Why Transcripts?






# Reason 1: Examine Wider Range of Skills



# Mean Length of Utterances

- “Teacher mad.”
- “My teacher mad at them.”
- “My teacher was mad when the boys yelled.”
- “If you start the school day later, students will be well rested, which will decrease the level of discipline from the teacher.”

# Mean Length of Utterances

- Overall index of language ability
  - Particularly captures grammar & syntax
  - Sensitive to growth (especially for young children)
- 


# Lexical Diversity

<b>She made his food</b>	
<b>He ate the food</b>	
<b>He ate everything</b>	
<b>She cleaned everything</b>	


# Lexical Diversity

<b>She made his food</b>	<b>She prepared his meal</b>
<b>He ate the food</b>	<b>He devoured his entree</b>
<b>He ate everything</b>	<b>He finished every last bite</b>
<b>She cleaned everything</b>	<b>She cleared the table</b>

# Lexical Diversity

- Number of different words/type token ratio
  - Richness of lexicon
  - Ability to use diverse lexicon to convey meaning
- 

# Reason 2: Increased Rigor

- **Transcription enhances accuracy**
  - **Process gives rich insight**
- 

# Reason 3: Written Record of Performance

SALT - Blake 8:4 PGHW.SLT

File Edit Analyze Database Explore Link Setup Window Help

Blake 8:4 PGHW.SLT x

- + Child
- + Language: English
- + Name: Blake
- + Gender: M
- + CA: 8;4
- + Ethnicity: Caucasian
- + Grade: 2
- + Context: Narr
- + Subgroup: PGHW
- + [EO] overgeneralization error
- + [EW] word-level error
- + [EU] utterance-level error
- + [LEX] lexicon error
- + 0:07

C Pookins (wa\*) was (a) a spoiled brat.  
C And she always get/3s her way.  
: :02  
C If she does/n't, (she) she make/3s face/s, (she) she throw/3s apple/s, and scream/3s as loud as shes[EW:she] can.  
: :02  
C And if she (do\* d\* i\*)->  
C (And) and she is a spoiled brat.  
C And she always get/3s her way.  
: :03  
C And she (d\*) never clean/3s up her room, :02 rollerskate/3s (in the) in the hallway, and (ah g\*) go/\*3s to sleep really late.  
C One day she (ah) skip/ed (alo\*) along (ah ah) a way XX home [EU].  
: :03  
C And she met a gnome (that can) that/'s really mag\*->  
C It has magic.  
: :02  
C And she want/ed three wish/s.  
C (And) and the gnome gived/give[EO:gave] it[EW:them] (to) to her.  
C Then she want/ed to be a flower.  
C And the gnome said, "It/'s really hard be/ing a flower".  
: :02  
C And the gnome said, "First you have to be in a pot and get some soil on your feet :02 and then (get) get a little wet".  
C "(And then) and then you/'re supposed to stand there for a couple (ho\*) hour/s".  
C (And the gno\*) and then the gnome touch/ed his (ah) hat.  
: :02  
C And a couple of hour/s went past.  
C And the sun (hit) hitte[d]hit[EO:hit] her.  
: :02  
C And she grew and grew\_and\_grew/grew.  
C And then she (ah) found out it/'s not really great (i\*) to have (their) her own way.  
C And (ah) she want/ed to turn back :02 or else  
C (And h\* l) and then (it it) without any warning (ah) rain (come ca\*) came.  
C And the gnome said (um), "Hey (you my) all my magic (ah) power/s will go away because (i\* i\*) my hat will shrink".  
C And then (ah) without think/ing (ah) she (ah let) let the (ah) gnome go under (th\* ah his hi\*) her (pe\*) petal/s.  
: :02  
C Then (ah) she want/ed to turn back.  
C (And) and the gnome said, "Yes but on only one condition".  
C "You have to throw away (your ah) your bad (som\* ah) face/s and your scream/s and your apple/s and you-  
F \*As if (thos\*) then the gnome turn/ed her back  
Entry 1

For Help, press F1

Ctrl Verbal Utts Entire Transcript English

Type here to search

87° Mostly sunny 1:01 PM 1/25/2022



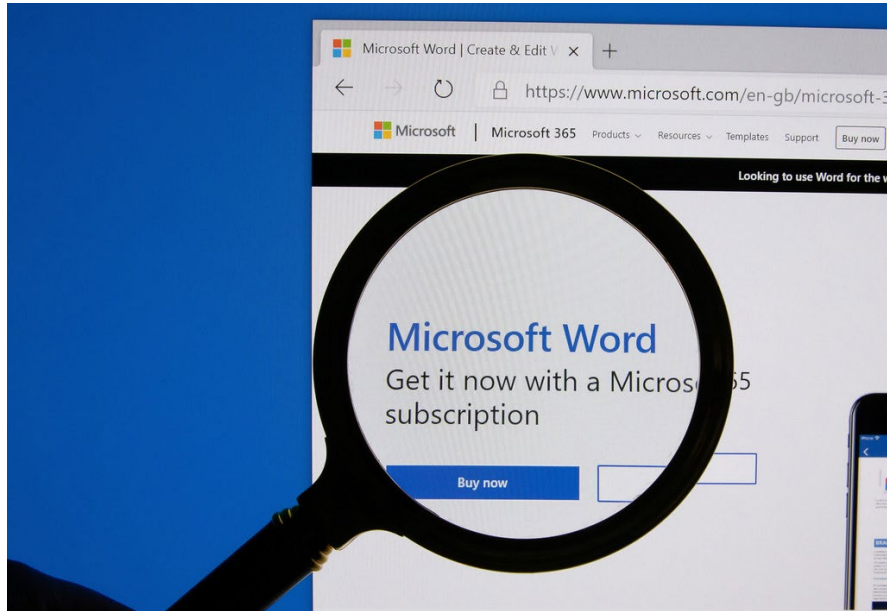
# Teacher, Parent, & Student Insight



# Provides Reference Over Time



# Simple Transcription



# SUGAR: Sampling Utterances and Grammatical Analysis Revised



The image shows a screenshot of a web browser displaying the homepage of the SUGAR website. The browser's address bar shows the URL "sugarlanguage.org". The page features a navigation menu with links for HOME, ABOUT, DOWNLOADS, PUBLICATIONS, NEWS, and CONTACT. The main content area has a dark blue background with the text "WELCOME TO SUGAR Sampling Utterances and Grammatical Analysis Revised". Below this, two authors are listed: Robert "Dr. Bob" Owens, Ph.D. (College of St. Rose) and Stacey L. Pavelko, Ph.D. (University of St. Augustine). At the bottom, the text "SUGAR is an easy valid" is partially visible.

sugarlanguage.org

WELCOME TO

## SUGAR

### Sampling Utterances and Grammatical Analysis Revised

Robert "Dr. Bob" Owens, Ph.D.  
College of St. Rose

Stacey L. Pavelko, Ph.D.  
University of St. Augustine

SUGAR is an easy valid


# Simple Transcriptions

- **Written record**
- **Calculate simple measures (MLU)**

# Question

**“So, you’re saying I can just write down a few utterances while my student is talking?”**

# Answers

- Real-time transcription not accurate
  - “Just talking” is not a standardized elicitation protocol
- 

# Will: Value of Basic Transcription





# Basic Transcription

- They play soccer.
- That's her house.
- They are in front.
- She raised her hand



# Basic Transcription: Added Value

- Transcript confirms your suspicions
- Document strikingly low MLU
- Mom says, “That’s him exactly! He tells the story, but he doesn’t *tell* the story.”

# Specialized Software: Added Value

- Go beyond MLU (with no extra effort)
  - Low lexical diversity
  - Low MLU
  - Difficulty with plot development (but OK coherence)
  - No problems with mazes
  - Minimal grammar and syntax errors
- More precise data to share (standard deviations)

# Is Specialized Software Worth It?



# Going Beyond MLU...

- Number of different words/TTR
- Reduplications & reformulations (i.e., mazes)
- Pauses & words per minute
- Errors & omissions
- Use of complex syntax

# Typologies

CLINICAL TYPE	CHARACTERISTICS
<b>Utterance Formulation</b>	<ul style="list-style-type: none"> <li>Increased number of mazes</li> <li>Maze revisions at word and phrase level</li> <li>Increased mean length of utterance</li> <li>Increased pauses within and between utterances</li> <li>Word order errors</li> </ul>
<b>Word Finding</b>	<ul style="list-style-type: none"> <li>Increased number of mazes</li> <li>Maze revisions and repetitions at word or part-word level.</li> <li>Pauses within utterances</li> <li>Word omissions</li> <li>Word choice errors</li> </ul>
<b>Hypo-verbal Rate</b>	<ul style="list-style-type: none"> <li>Decreased number of utterances and words per minute</li> <li>Pauses within and between utterances</li> </ul>
<b>Hyper-verbal Rate</b>	<ul style="list-style-type: none"> <li>Increased number of utterances and words per minute (increased MLU)</li> <li>May be combined with reduced semantic content (fewer different words)</li> </ul>
<b>Pragmatic or Discourse</b>	<ul style="list-style-type: none"> <li>Decreased turn length</li> <li>Decreased responses to questions</li> <li>Production of non-contingent utterances</li> <li>Pronominal reference errors</li> <li>Problems with topic maintenance</li> <li>Difficulty discriminating new vs. old information</li> <li>Difficulty with narrative structure</li> </ul>
<b>Semantic or Reference</b>	<ul style="list-style-type: none"> <li>Increased production of overgeneralization errors</li> <li>Increased word choice errors</li> <li>NP-VP symmetry errors; gender, number</li> <li>Redundancy</li> <li>Increased abandoned utterances</li> <li>Increased use of universal pronouns, e.g., thing, stuff</li> </ul>
<b>Delayed Development</b>	<ul style="list-style-type: none"> <li>Decreased number of different words</li> <li>Low MLU</li> <li>Fewer total words</li> <li>Reduced syntactic diversity and complexity</li> <li>Noun- and Verb-Phrase elaboration</li> <li>Question forms</li> </ul>

Clinical Typology of Language Disorders<sup>1</sup>

# Software Comparison

	Hand Transcription	CHILDES/CLAN	SALT
Elicit & record	X	X	X
Transcribe sample	X	X	X
Hand coding	X	X	X
Automatic measures		X	X
Many measures		X	X

# Software Comparison

	Hand Transcription	CHILDES/CLAN	SALT
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Hand coding	X	X	X
Automatic measures		X	X
Many measures		X	X
Database compare			X
Clinical summary			X
Fee			X



# Database Comparisons

- Charts available for major measures (see handout)
- SALT automates the process

# Database Comparison Examples

SALT - Geoff PERS\_DBSMR

File Edit Analyze Database Explore Link Setup Window Help

Geoff PERS.sit Geoff PERS\_DBSMR x

**Geoff PERS**

<p><b>TRANSCRIPT INFORMATION</b></p> <p>Speaker: Geoff (Child)</p> <p>Sample Date:</p> <p>Current Age: 17;6, Grade: 11</p> <p>Context: Persuasion</p>	<p><b>DATABASE INFORMATION</b></p> <p>Database: Persuasion</p> <p>45 Samples Matched by Age</p> <p>35 Samples Cut at 307 Number Total Words</p> <p>Context: Persuasion</p>
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**STANDARD MEASURES REPORT**

LANGUAGE MEASURE	Child		DAT	
	Score	+/-SD	Mean	Min
Compared to 45 Samples Matched by Age (ENTIRE TRANSCRIPT)				
Current Age (17;6)	17.50	0.07	17.48	17.00
<b>TRANSCRIPT LENGTH</b>				
Total Utterances	39	0.39	32.24	8
C&I Verbal Utts	39	0.46	31.31	8
All Words Including Mazes	524	-0.14	562.71	140
Elapsed Time (3:40)	3.67	0.02	3.64	0.95
<b>INTELLIGIBILITY</b>				
% Intelligible Utterances	100%	0.47	99.35	95.45
% Intelligible Words	100%	0.48	99.96	99.64

**Compared to 35 Samples Equated by Same Number of Total Words (CUT AT:**

<b>SYNTAX/MORPHOLOGY</b>				
# MLU in Words	12.23	-0.96	17.45	10.27
# MLU in Morphemes	13.31 *	-1.02	19.31	11.30
# Verbs/Utterance	2.27 *	-1.11	3.27	2.10
# SI Composite Score	1.80	-0.62	2.11	1.42
<b>SEMANTICS</b>				
# Number Total Words (NTW)	307	0.00	307.00	307
# Number Different Words (NDW)	108 *	-1.77	132.86	93
# Type Token Ratio (TTR)	0.35 *	-1.77	0.43	0.30
# Moving-Average TTR (100)	0.56 *	-1.80	0.63	0.54

SALT - Geoff PERS\_DBPR

File Edit Analyze Database Explore Link Setup Window Help

Geoff PERS.sit Geoff PERS\_DBSMR Geoff PERS\_DBPR x

**Performance Report**

Geoff PERS

Age: 17;6, Grade: 11

Language Sample Analysis with SALT Software

Ellicitation Task and Database Overview

Geoff completed a language sample where he provided a persuasive argument. His language sample was compared with samples from 45 speakers completing the same task. These database samples were within 6 months of Geoff's age. Some language measures, such as number of different words and number of errors, are affected by the length of the sample, i.e., the longer the sample, the more opportunity to produce them. For these measures, Geoff's sample was compared with a subset of 35 samples matched in length by the same number of words. All measures are interpreted using a standard deviation interval of 1.00 SD.

Transcript Length

Geoff produced 39 utterances using a total of 524 words

Intelligibility

Geoff's sample was 100% intelligible.

Syntax/Morphology

Geoff's mean length of utterance (MLU) in words was 12.23, 1.02 SD below the database mean of 19.31. Geoff's sample shows higher SI scores indicate increased use of complex syntax. For example:

C And (uh) some supportive fact/s are like how the g

Semantics

Geoff used 108 different words (NDW) within an analysis set of 307 total words (NTW). NDW was 1.77 SD below the database mean. Comparing NDW to NTW across the sample shows a moving-average type token ratio of 0.56, which was 1.80 SD below the database mean of 0.63. This low ratio, along with low NDW, indicates reduced vocabulary diversity.

Performance Report Settings

Speaker's first name (taken from +Name entry):

If unknown, use 'the speaker', 'the child', 'the student', 'the client', etc.

Gender (taken from +Gender entry):  Female  Male  Unknown

Include list of relevant reports

its for this task.

se peers. His MLU in morphemes was 13.31, which w

verage number of clauses per utterance. In general,

nts. His most complex utterance contained 3 clauses

# Will: Added Value of SALT Analysis

STANDARD MEASURES REPORT							
LANGUAGE MEASURE	Child		DATABASE				
	Score	+/-SD	Mean	Min	Max	SD	%SD
<b>Compared to 45 Samples Matched by Age (ENTIRE TRANSCRIPT)</b>							
Current Age (17;6)	17.50	0.07	17.48	17.00	18.00	0.30	2%
<b>TRANSCRIPT LENGTH</b>							
Total Utterances	39	0.39	32.24	8	77	17.25	53%
# C&I Verbal Utts	39	0.46	31.31	8	74	16.60	53%
All Words Including Mazes	524	-0.14	562.71	140	1308	282.82	50%
Elapsed Time (3:40)	3.67	0.02	3.64	0.95	8.58	1.81	50%
<b>INTELLIGIBILITY</b>							
% Intelligible Utterances	100%	0.47	99.35	95.45	100.00	1.38	1%
% Intelligible Words	100%	0.48	99.96	99.64	100.00	0.09	0%
<b>Compared to 35 Samples Equated by Same Number of Total Words (CUT AT 307 NTW)</b>							
<b>SYNTAX/MORPHOLOGY</b>							
# MLU in Words	12.23	-0.96	17.45	10.27	32.80	5.42	31%
# MLU in Morphemes	13.31 *	-1.02	19.31	11.30	35.55	5.90	31%
# Verbs/Utterance	2.27 *	-1.11	3.27	2.10	6.20	0.90	28%
# SI Composite Score	1.80	-0.62	2.11	1.42	3.36	0.49	23%
<b>SEMANTICS</b>							
# Number Total Words (NTW)	307	0.00	307.00	307	307	0.00	0%
# Number Different Words (NDW)	108 *	-1.77	132.86	93	158	14.02	11%
# Type Token Ratio (TTR)	0.35 *	-1.77	0.43	0.30	0.51	0.05	11%
# Moving-Average TTR (100)	0.56 *	-1.80	0.63	0.54	0.68	0.04	6%

# Specialized Software: Added Value

- **Go beyond MLU (with no extra effort)**
  - **Low lexical diversity**
  - **Low MLU**
  - **Difficulty with plot development (but OK coherence)**
  - **No problems with mazes**
  - **Minimal grammar and syntax errors**

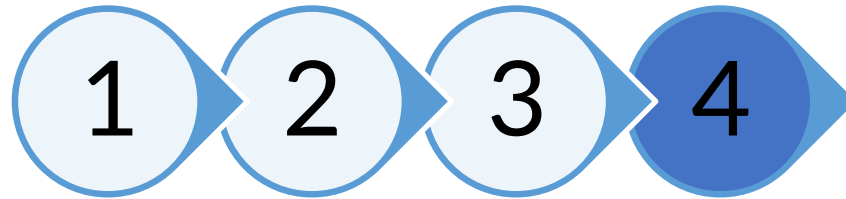
# Specialized Software: Added Value

More precise data to share (standard deviations)

SYNTAX/MORPHOLOGY								
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#	SI Composite Score	1.80	-0.62	2.11	1.42	3.36	0.49	23%
SEMANTICS								
#	Number Total Words (NTW)	307	0.00	307.00	307	307	0.00	0%
#	Number Different Words (NDW)	108 *	-1.77	132.86	93	158	14.02	11%
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#	Moving-Average TTR (100)	0.56 *	-1.80	0.63	0.54	0.68	0.04	6%

# Learning Objective #4

Resources and next steps



# Must Believe that Language Sampling is Important




# Build Off Your Competencies

- Administration of standardized test
- Knowledge of *your* students
- Knowledge of what's important for *your* students



# Starting with Rubrics

- Learn protocols
  - Practice coding
  - Go for it!
- 

# Moving into Transcription

- Many resources available online
- Need some time, practice, and refreshers to maintain competency


# What about text to speech?




# Are There Shortcuts?



# Transcription Success Stories

- **Centralized transcription**
    - **In-house**
    - **Outsourced**
  - **Creative funding**
- 

# Clinical Scenarios

- Norm-referenced testing
  - Value added from language sampling
- 

# Maria

- In Kindergarten, suspected language disorder
- CELF-P Standard Score = 77
- Question validity given bilingual status
- Work with ESL teacher on Narrative Assessment Protocol

# Narrative Assessment Protocol

- Difficulty with narrative in English (black circles)
- Strong narrative in Spanish (pink circles)


Sub-Goal	0	1	2	3+	1- Opens fridge to see pitcher/ runs inside for lemonade 2- Takes drink (took a sip) 3- Carries pitcher outside to friends
Sub-Problem	0	1	2	3+	1- Pitcher too high (too far up) 2- Too sour (doesn't taste right) 3- No cups
Sub-Solution	0	1	2	3+	1- Gets step stool 2- Adds sugar (something to change flavor) 3- Runs inside for cups
Sub-Resolution	0	1	2	3+	1- Gets pitcher (reaches it) 2- Tasted yummy (sweet) 3- Returns with cups



# Maria: Comprehensive Assessment

- English data show language difficulties
- Spanish narrative performance notably better than English
- Consistent with report from parents and ESL teacher

# Lee


- 15-year-old student at re-evaluation
  - Administer the CELF (low performance, consistent with 6 prior administrations)
  - Vocation discussions at IEP meeting
- 

# Lee: Persuasion

- Provides one weak reason
- No awareness of counter arguments or compromises

<b>Supporting Reasons</b>	<ul style="list-style-type: none"><li>• Reason(s) are comprehensive; include detail</li><li>• Benefit(s) to others are clearly understood</li></ul>	<ul style="list-style-type: none"><li>• One or more reasons are offered to support desired change</li><li>• Benefit(s) to others are unclear or omitted</li></ul>	<ul style="list-style-type: none"><li>• Reason(s) are confusing or vague</li><li>• Significant/obvious reason(s) are not stated</li><li>• Reason(s) are not plausible; do not support change</li></ul>
<b>Other Point of View (Counter Arguments)</b>	<ul style="list-style-type: none"><li>• Other point(s) of view are clearly explained; include detail</li><li>• Includes language to support or refute other point of view</li></ul>	<ul style="list-style-type: none"><li>• Other point(s) of view are acknowledged</li></ul> OR <ul style="list-style-type: none"><li>• Dismissive of other point(s) of view</li></ul>	<ul style="list-style-type: none"><li>• Other point(s) of view are unclear or omitted</li></ul>
<b>Compromises</b>	<ul style="list-style-type: none"><li>• Includes language, with some detail, to support or refute compromising</li></ul>	<ul style="list-style-type: none"><li>• Compromise(s) are acknowledged</li></ul> OR <ul style="list-style-type: none"><li>• Dismissive of compromising</li></ul>	<ul style="list-style-type: none"><li>• Compromises are unclear or omitted</li></ul>

# Value Added of Transcription

- Observe relative strength in verbal fluency
  - Low MLU, clausal density, lexical diversity
  - High reduplications and reformulations
- 

# Value Added of Transcription

- Lee says, “Yeah, I kind of screwed that up”
- Insight for all team members
- Opens the door to communication needs with vocational considerations

# Thank You!

Online survey:

[bit.ly/widpisurvey](http://bit.ly/widpisurvey)

Your Universal Survey

Passcode is:

SLPEvalPD34765

