Learner Outcomes

- Explain the rationale for using narrative language assessment for school-age children
- Describe narrative language assessment using language sample analysis
- Identify and explain one evidence based intervention using narrative language in school-age children

Why Narratives
GOLD STANDARD across various language backgrounds
- Norm-referenced, Standardized have limited in ecological validity & are culturally biased
- Strengths & Needs
- Guide to intervention
- Predictor of Language Progress
- Rich source of information

Heilmann et al, 2010; Heilmann & Malone, 2014; Heilmann et al., 2016

Task is more congruent with requirements of schooling
- Decontextualized, literate language
- Analyses can directly inform targets of intervention
- Correlates with literacy and academic achievement
  - Plan, organize, generate meaning, and monitor message for coherence using natural language beyond sentence level

Research Shows
- Useful tool in identifying language impairment (Gillam, 2010)
- Retell tasks with visual aids more useful (Wellman et al, 2009)
- Narrative language abilities more sensitive to disorder in those who “recover” (Gillam, 2009)
Use of pictures leads to higher MLUs relative to unstructured narratives in children with Down syndrome (Miles, 2006)

Narrative intervention gains in language skills 40-60% higher than traditional “language card” therapy (Gillman, 2009)

Narrative intervention also effective for students with significant disabilities

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Language disorder & Narratives

- Production & Comprehension
  - Micro-elements: utterance complexity; lexical diversity
  - Delays unlikely to resolve over time

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Narrative Macrostructure

- Greater variability across stories
- Incomplete reference to characters and story contexts
- Fewer story grammar components
Narrative Microstructure

- Fewer complex sentences
- More grammatical errors
- Limited number & type of conjunctions
- Fewer mental and linguistic verbs
- Fewer adverbs

Kindergarten to 6th grade

Narrative Story Retells
- Frog Stories: K, G1
- Pookins Gets Her Way: G2
- A Porcupine Named Fluffy: G3
- Doctor De Soto: G4, G5, G6

Advantages of Wordless picture books

- Clinician controls content, length, and child’s background knowledge
  - Facilitating comparisons across children
- Mercer Mayer’s ‘Frog’ stories have been used across age groups and backgrounds to elicit narrative language samples
- Similarities across stories

Heilmann et al., 2016
The Frog Stories

- Frog where are you?
- One frog too many
- Frog on his own
- Heilmann et al (2016) found no clinically significant differences between stories
  - Shows stability of language sampling procedures despite apparent subjectivity
  - Enables progress monitoring

Other Stories

- Pookins Gets her Way: Helen Lester
- A Porcupine Named Fluffy: Helen Lester

- Doctor De Soto: William Steig

Key Measures

- Total number of intelligible utterances – TNIU based on CU
- Mean Length Utterance in words – MLUw
- Number of different words – NDW
- Subordination index – SI
  - Grades 4 and up
- Macrostructure
- Narrative Scoring Scheme - NSS
Protocol

- Saltsoftware.com
- Narrative Elicitation Procedure

Case Studies

- FWAY: Kailie 6;5
  - Kindergarten
- PGHW: Prentice 7;10
  - Second grade; ADHD
  - As part of his three year re-evaluation for speech-language services, his school SLP elicited a story retell to assess general oral language progress and also to evaluate ability to tell a story concisely and in sequence

Case Studies

- APNF: Bianca 8;11
  - Third grade
  - Tends to “lose” her listeners
- DDS: Lili 12;0
  - 6th grade
  - Typically developing
Grades 6-8
Fables

Rationale

- Subtle deficits not obvious in conversation
- Perform as well as peers in conversational language sampling. More challenging speaking tasks reveal deficits
  - Fewer complex utterances
  - Fewer words & utterances
  - Reduced clarity, precision, & efficiency in academic settings
  
Nippold et al, 2008; Tomblin & Nippold, 2014

- Use limited to young children
  - Task design
  - Limited training
  - Time constraints
  - Only 45% of US SLPs (Paelko et al., 2016)
- Recent research has focused on designing new tasks for 12+ population
  - Talk about complicated topics elicits more complex spoken language than simpler topics

- Fable: Teaches moral lessons through actions of animals acting like people
  - Aesop’s Fables, 1947
- Part of language arts or literature curriculum at all levels
  - Read, retell, interpret
- Underlying school expectations is proficient use of complex syntax

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**Fables & Middle School**

- Cognitive & socioemotional development
- Critical thinking: analyzing the validity, logic, and relevance of information

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**Fable Task** Nippold et al, 2017

- Recorded sample transcribed & analyzed for language productivity and syntactic complexity
  - Productivity: Total # C-units (TCU)
  - Syntactic complexity: MLCU & clausal density (CD)
  - All three measures are sensitive to language growth during school-age and adolescent years (Nippold et al., 2008, 2009)
- MLCU and CD are highly correlated
Suggested Clinical Protocol

- Use one of 4 adapted Aesop’s Fables (See Appendix of Nippold et al, 2017)
- Provide a written copy of the fable to the child along with colorful illustration
- Clinician Reads Fable then covers the text with illustration visible
- Audio record the child’s retell of the fable in own words (5 minutes)
- Transcribe the sample (20-30 min)

Case Study

- Listen to Audio
- Segment sample into C-Units
- Code sample for all main and subordinate clauses
- Enter into SALT; get the total number of C-units, MLCU, and Subordination Index (SI)
- Compare to Norms in Table 2 of Nippold et al (2017)

Ideas for Intervention (Nippold et al., 2017)

- Short simple utterances; fragments; few subordinate clauses
- Retell small sections of a Fable from ELA class
  - Characters’ thoughts, feelings, and perspectives to elicit complex sentences
  - Later encourage use of longer utterances with more clauses
  - Re-assess using a different fable track progress or further needs
Intervention ideas

- Understand, define, and use unfamiliar words
- Nominal clauses: talk about characters’ thoughts & feelings using metacognitive verbs like “think, worry, assume”
- Adverbial clauses: subordinate conjunctions – after, unless, although

Goals in Narrative Intervention

- Improve story comprehension (literal, inferential, gist)
- Improve the ability to construct more complex stories
- Improve vocabulary and sentence complexity

Therapy targets

- Inclusion of story grammar elements
- Temporal adverbs
- Causal adverbs
- Mental & linguistic verbs
- Pronoun use
- Dialogue
- Complex sentences
Phase 1: Teach a basic story
- Setting
- Problem
- Response
- Attempt
- Response
- Attempt
- Outcome
- Reaction

Phase 2: Elaboration
- Assist students in “elaborating” on the story grammar elements they have learned
- Character names, personality attributes
- Specific setting elements, city names
- Elaborated actions
- More sophisticated vocabulary to describe character feelings
- Push students to be more complex – elaborated noun phrases (name characters and say one thing about them) – “Susan, with red bows in her hair,”
- Go back to old stories the story told and add pieces to make the story more complex
- Add one bit of complexity at a time

Phase 3: Becoming independent story tellers
- Develop stories from single scenes
- Each child develops his or her own story
- Children tell each other’s stories
- Use bingo cards to encourage students to “monitor” each other for SG elements
- Start with story boards
- Finish without them