**Collecting & Analyzing Writing Samples from School-Age Children & Adolescents**

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**Outline**
- Introduction
- Tasks & procedures for collecting writing samples
- Measures of writing performance
- Methods for calculating writing variables
- Discussion

**Purposes**
- Describe nonstandardized tasks & procedures for collecting writing samples of school-age children & adolescents
- Describe measures of writing performance & methods of analysis

**Introduction**

Writing Skills of 8th and 12th Graders

<table>
<thead>
<tr>
<th>Grade</th>
<th>Below Basic</th>
<th>Basic</th>
<th>Proficient</th>
<th>Advanced</th>
</tr>
</thead>
<tbody>
<tr>
<td>8th</td>
<td>21%</td>
<td>54%</td>
<td>24%</td>
<td>3%</td>
</tr>
<tr>
<td>12th</td>
<td>20%</td>
<td>52%</td>
<td>24%</td>
<td>3%</td>
</tr>
</tbody>
</table>

National Center for Education Statistics (2012)

**Written Language Assessment & Treatment**

- Within our scope of practice (ASHA 2001, 2010)
- 30% of SLPs serve students in reading & writing (ASHA 2012)
- Many SLPs do not feel prepared, especially in assessment & writing (Blood et al., 2010; Fallon & Katz, 2011)
Assessment of Expressive Language

Oral Language Production

Standardized Tests

Nonstandardized Methods

Oral Language Samples

Writing

Standardized Tests

Nonstandardized Methods

Writing Samples

- Writing samples
  - Useful for profiling strengths and needs, planning intervention, monitoring progress
  - Yet, consensus regarding the best techniques for collecting and interpreting writing samples has not been reached (Puranik et al., 2008)

- SLPs are responsible for selecting diagnostic procedures that have scientific support from the literature.

Tasks & Procedures for Collecting Writing Samples

- A variety of tasks & procedures may be used to collect written language samples
- Written language sampling methods help to describe individual profiles across language domains (e.g., syntax, morphology), levels (e.g., sentence, discourse) & processes (e.g., spelling, composing)

Tasks & Procedures for Collecting Writing Samples

- Our focus - discourse level writing samples
  - Organization of sentences into larger cohesive communication units
  - Narration & exposition (Nelson, 2010)
    - Narrative discourse – e.g., personal narratives, narratives about the content of a video, etc.
    - Expository texts – used primarily to provide information or explain, e.g., information presented as explanations of cause & effect, comparison & contrast, persuasion, opinion

Examples of Tasks & Procedures

<table>
<thead>
<tr>
<th>Types of Tasks</th>
<th>Prompts</th>
<th>Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expository - Persuasive</td>
<td>“Should children have to go to school in the summer?”</td>
<td>Participants selected 1 of 2 questions/prompts &amp; hand wrote responses</td>
</tr>
<tr>
<td>essays</td>
<td></td>
<td>Time – 20 minutes</td>
</tr>
<tr>
<td>Expository – Descriptive</td>
<td>“Tell me why you like Halloween”</td>
<td>Examiner provided prompt; participants hand wrote responses</td>
</tr>
<tr>
<td>(explanation)</td>
<td></td>
<td>Time – not specified</td>
</tr>
<tr>
<td>(Apel &amp; Apel, 2011)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expository – Compare &amp;</td>
<td>“Describe similarities &amp; differences between social studies &amp; science…”</td>
<td>Examiner provided prompt; participants hand wrote responses</td>
</tr>
<tr>
<td>contrast</td>
<td></td>
<td>Time – not specified</td>
</tr>
<tr>
<td>(Apel &amp; Apel, 2011)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Examples of Tasks & Procedures (Continued)

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<th>Types of Tasks</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Expository – Written retelling of text read (Puranik et al., 2008)</td>
<td>Examiner read expository passage, “Where do people live?” (Qualitative Reading Inventory – 3)</td>
<td>Participants were read an expository passage &amp; asked to write what they remembered on lined paper. Time – given as much time as needed; finished in 10 minutes</td>
</tr>
<tr>
<td>Expository – picture description using isolated picture or sequences of pictures (Tur-Kaspa &amp; Dromi, 2001)</td>
<td>Poster; sequence of 6 colored pictures</td>
<td>Participants described what was seen in a poster; also described sequence of events using 6 colored pictures; handwritten; group sessions. Time – not specified</td>
</tr>
<tr>
<td>Narrative – in response to storybook pictures (Asker-Aranason et al., 2010)</td>
<td>Pictures from “One Frog Too Many”; wrote story for “Someone who could not see the pictures”</td>
<td>Participants previewed pictures; wrote story by typing into computer using ScriptLog, a key-stroke logging program. Time – not specified</td>
</tr>
</tbody>
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Examples of Tasks & Procedures (continued)

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<td>Narrative – in response to oral prompt, nonspecific topic (Nelson, 2010)</td>
<td>“We are interested in the stories you write… tell about a problem &amp; what happens; characters &amp; story can be real or imaginary”</td>
<td>Participants were given a plain sheet of paper to plan for 10 min. &amp; lined paper for remaining 1 hour; read aloud their story afterwards. Time – 1 hour</td>
</tr>
<tr>
<td>Narrative – in response to oral prompt, specific topic (Bahr et al., 2012)</td>
<td>“One day ___ had the worst day at school.”</td>
<td>Examiner provided prompt; participants hand wrote responses. Time – 5 minutes</td>
</tr>
<tr>
<td>Narrative about content of video (Ivy &amp; Masterson, 2011)</td>
<td>10 min. video segment for a “Little Rascals” episode</td>
<td>Participants viewed video; produced handwritten narrative. Time – 10 minutes</td>
</tr>
</tbody>
</table>

MEASURES OF WRITING PERFORMANCE

- For all types of writing tasks
- For wide range of student populations
  - Child – adolescent
  - Mainstream American English, dialect (e.g., African American English), and bilingual speakers
  - Variety of special needs, including LD, Down syndrome, hearing impairment
- Relate (directly or indirectly) to Common Core
- Are aspects of lower performance for students with language difficulties

Writing Productivity

- Total # words written
- Total # T-units written
  - T-units
    - How we segment writing samples
    - One independent clause plus all of the dependent clauses attached to it (Hunt, 1970)
    - Relies on grammatical structure, not punctuation
    - Examples:
      - I am eight years old because I just had my birthday. 1 T-unit
      - I am eight years old and I am in the third grade and I go to Rogers Elementary. 3 T-units

(Nelson, Bahr, & Van Meter, 2004)

Vocabulary

- Overall vocabulary diversity
  - # of different words
    - e.g., Danzak, 2011a; Craig et al., 2009
- Specific class of vocabulary
  - Total # of adjectives, abstract nouns, or metacognitive verbs
    - e.g., Easterbrook & Stoner, 2006; Sun & Nippold, 2012
Syntax
- Length: Mean length of T-unit (in words)
  - Total # words in sample
    - Total # T-units
  e.g., Nelson, 2010; Sun & Nippold, 2012
- Complexity: Clausal density
  - Total # of independent and dependent clauses
    - Total # T-units
  e.g., Koutsoftas & Gray, 2012; Sun & Nippold, 2012
- Correctness: Percentage grammatical T-units
  - Total # grammatical T-units
    - Total # T-units
  e.g., Puranik et al., 2008

Spelling
- Proportion of words spelled correctly
  - # words spelled correctly
    - Total # words written
  e.g., Askar-Aramas a et al., 2010; Horton-Ikard & Pittman, 2010

Punctuation/Writing Conventions
- # of periods used correctly at end of sentences
- # of capital letters used correctly at beginning of sentences
  e.g., Kay-Raining Bird et al., 2008; Puranik et al., 2008

Holistic Rubrics
- 6+1 Trait Rubrics ® for Writing
  - Education Northwest
  - http://educationnorthwest.org/traits
  - These areas are rated on a scale of 1-5 (or 6)
    - Ideas
    - Organization
    - Voice
    - Word Choice
    - Sentence Fluency
    - Conventions
    - Presentation
  e.g., Crag et al., 2009; Koutsoftas & Gray, 2012

Narratives
- Story grammar analysis
  - Checklist of story grammar elements used
    - Setting
    - Complicating action
    - Reaction of main character
    - Strategy
    - Action
    - Consequence
    - Moral/ending
  e.g., Nelson, 2010; Koutsoftas & Gray, 2012

- Other variations
  - Hall-Mills & Apel, 2013

Genre-Specific Measures of Discourse Structure
Expository (Informative/Explanatory)
- Checklist of these 5 components
  - Assignment
    - Whether the overall structure was appropriate for the assignment
  - Logical sequence of ideas
  - Introduction of thesis
  - Body
    - Supporting ideas and evidence to support thesis
  - Conclusion

Persuasive (Opinion Piece/Argument)
- Tally of # different reasons given to support position

Manual Calculations
- Photocopy the student's writing sample.
- Divide into T-units.
- Manually tally variables of interest.
  - e.g., Easterbrooks & Stoner, 2006

SALT
- Systematic Analysis of Language Transcripts
  - www.saltsoftware.com
- Type sample into SALT
  - Divide into T-units
  - Use SALT conventions

  e.g., Danask, 2011a, Nelson, 2010
To calculate clausal density, enter SI codes into transcript.

- ANALYZE ➔ SUBORDINATION INDEX

Type in any word or utterance-level codes you choose to identify any features of the sample you want to measure

- Ex: [ADJ] after each adjective, if you want to track the # of adjectives the student writes
- ANALYZE ➔ CODE SUMMARY
  - Tally of each code

Microsoft Word

- Type sample into Word
  - Divide into T-units

Writing sample analysis is useful for describing language domains, levels, & processes for children with & without disabilities.

Our research interests include the use of “long” vs. “short” writing samples & children’s motivation toward reading & writing.
RESOURCES FOR WRITING ASSESSMENT AND INTERVENTION

Books

Articles

Online Resources Available from http://www.asha.org/policy

Contact
jprice@email.wcu.edu
scjackson@nccu.edu