Leveraging a Multidimensional Linguistic Analysis of Constructed Responses Produced by College Readers

LOL Lab
Language Of Learning Lab
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Background:

- Models of reading literacy assume relations exist between foundational reading skills (vocabulary, reading comprehension) and coherence-building[1,2,3,4]
- Literacy frameworks assume reading varies across contexts (e.g., genre) [5,6]
- Cohesion found to be a reliable proxy for the coherence-building processes associated with deep comprehension[7,8]
- Gaps in literature:

Using Multi-Dimensional Linguistic Analyses

Relations Between Linguistics & Individual Differences

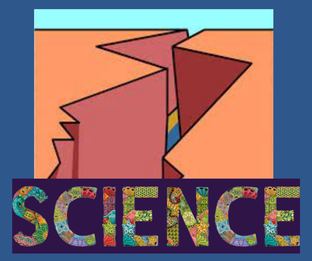
Questions:

1. How do readers' foundational reading skills (vocabulary, reading comprehension) relate to the cohesion of constructed responses?
2. To what extent do these relations vary across contexts (i.e., text and sample)?

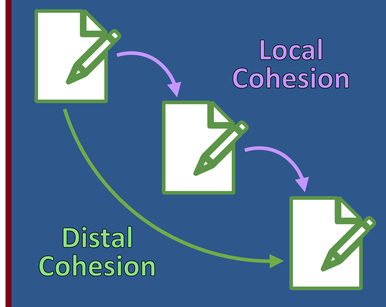
Abstract #1099

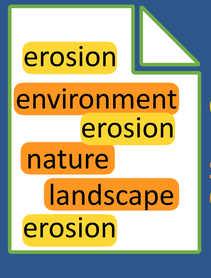
Data:

Participants from a 4-year institution (N=263) or 2-year community college (N=297) read 2 texts (history and science) and completed assessments of reading comprehension and vocabulary skills



Think-Alouds





Lexical Cohesion

Semantic Cohesion

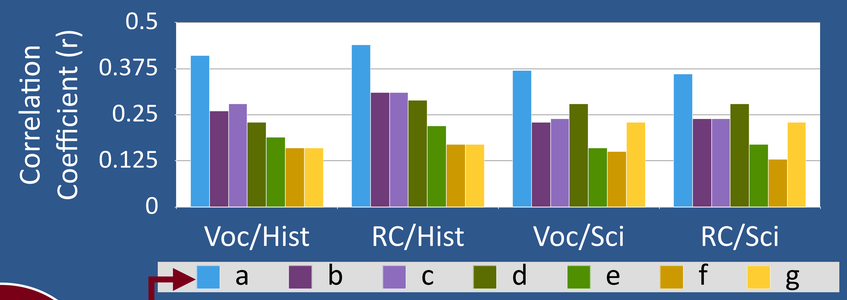
Descriptives:
a. number of words

Local Cohesion:
b. adjacent response overlap
c. adjacent response Word2vec overlap

Distal Cohesion:
d. adjacent response (+2) overlap
e. adjacent response Word2vec (+2) overlap

Source overlap:
f. proportion of type (unique word) overlap
g. source similarity Word2vec overlap

Results:



Discussion:

- Suggests that readers with stronger reading skills (RC/Voc) make more connections
- Cohesion more strongly related to reading comprehension than vocabulary skills, indicating the importance of comprehension skills that elicit coherence-building
- Relationship between reading skills and cohesion relatively stable across contexts (but differ in magnitude)

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