

The Language Environment Analysis (LENA) System: A Literature Review

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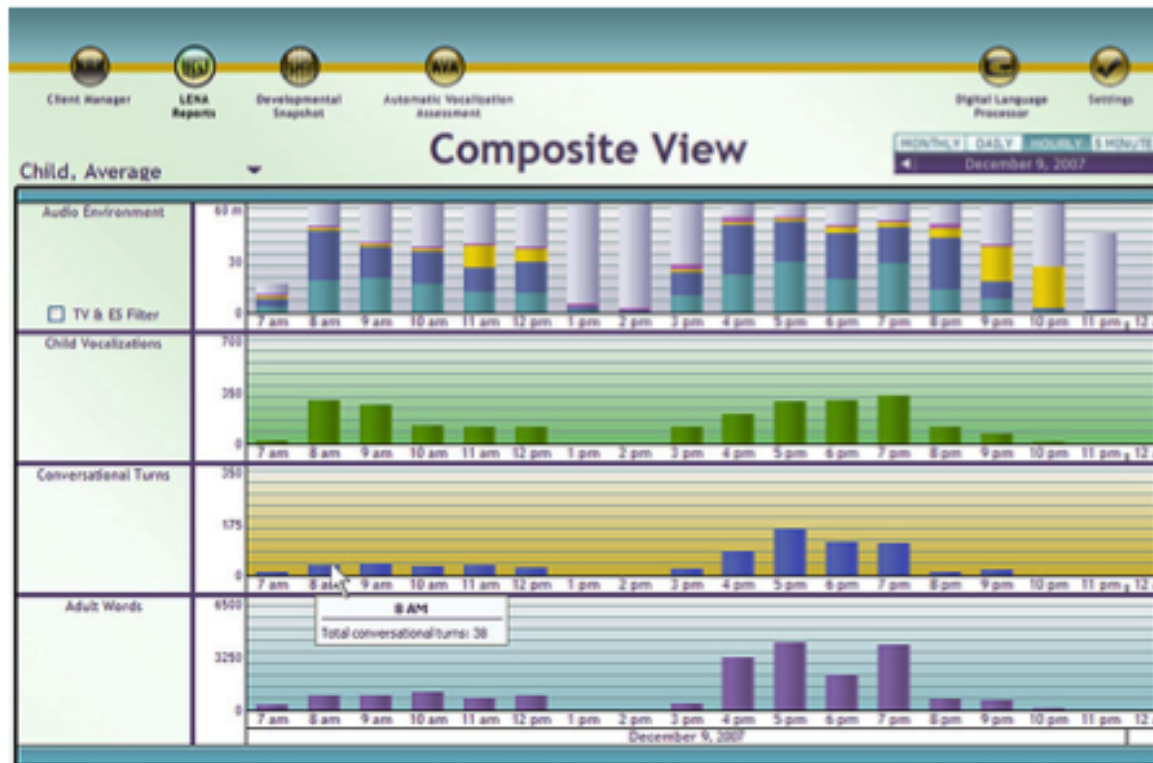
Purpose

- To familiarize researchers and with both the LENA System device and its body of literature

Digital Language Processor



LENA Graphs



Data Collection

- Medline, PsycInfo, Google Scholar
- 38 articles

Review

METHODS	PARTICIPANTS
Study Type	Number of Participants
LENA Variables	Ages
Number of Recordings	Languages
Length of Recordings	Socio-Economic Status
Time Intervals Analyzed	Additional Needs
Additional Assessments	
Additional Software	
Transcription Software	
Human Coders	

Strengths

- Successfully collects full day recordings in a child's natural language environment
- Provides useful validated variables for numerous populations and ages
- Used in a variety of study designs and in conjunction with other tools

Considerations

- Occasionally mislabels segments
- 'Overlapping Sounds' label may hide some data
- Does not provide a transcription
- More normative data is needed
- New variables could be helpful (ie. Infant directed speech)

Moving Forward

- DARCLE darcle.org
 - Pre-PI Level DARCLE hillary.ganek@mail.utoronto.ca
- Homebank homebank.talkbank.org
- LENA Research Foundation lena.org