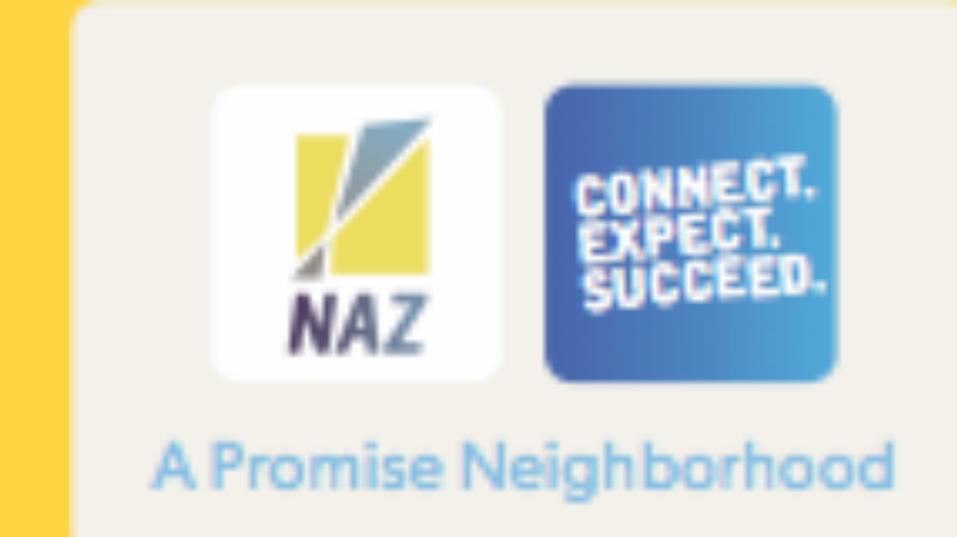


Moving toward Community-Based Response to Intervention: LENA in a Promise Neighborhood Initiative

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Introduction

- Promise Neighborhoods are place-based, comprehensive initiatives using evidence-based practices to promote educational achievement and attainment across the life span
- These place-based initiatives would benefit from population-level assessment and multi-tiered systems of support that identify children not making expected levels of developmental progress, and in turn provide more intensive services to these individuals
- LENA may be well-suited to providing one portion of developmental assessment across a place-based sample.
- What procedures are needed to use LENA to monitor development of large numbers of children in a Promise Neighborhood or other place-based initiatives?

The Big Ideas

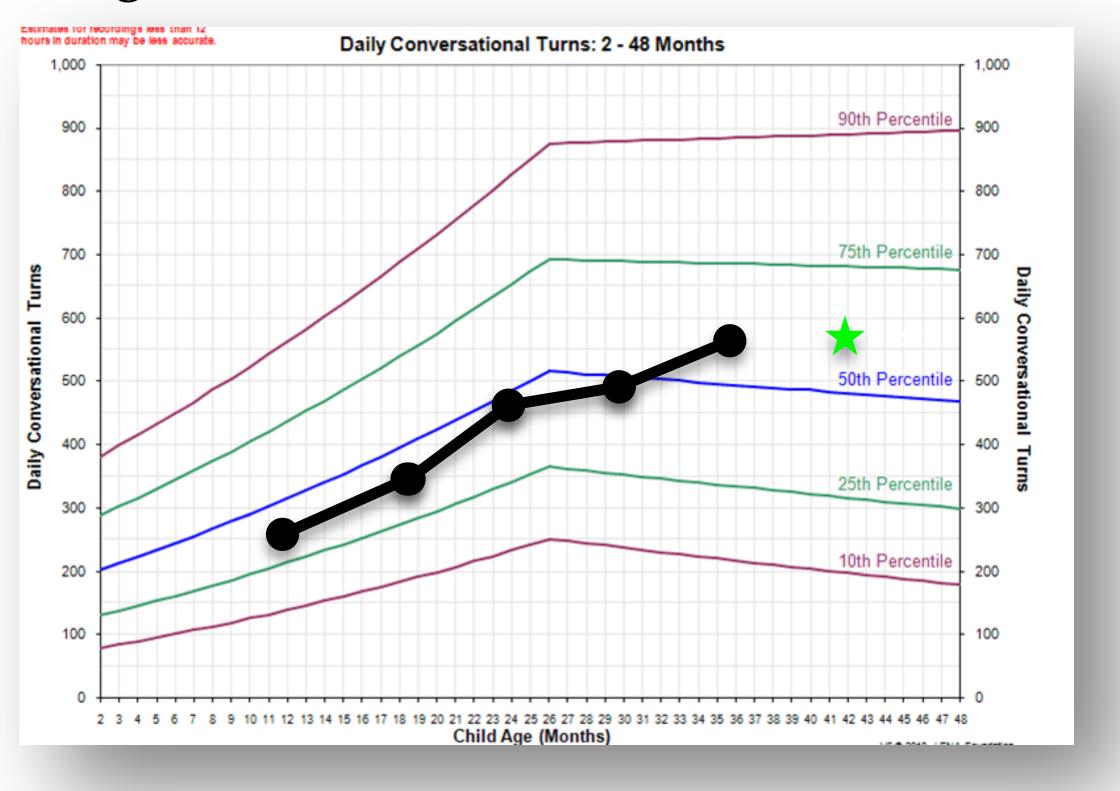
- Response to Intervention Multi-tiered system of support and an emerging recommended practice in early childhood special education, but as yet restricted to classroom programs. To serve high-need communities and young children, RTI must be adapted so that universal assessment occurs at the community level (not the classroom), and parents learn of possible services and supports when developmental assessments might indicate a need.
- LENA Focus on 'standard' measures Child Vocalizations, Adult Word Count, Conversational Turns and other elements of child language and interaction
- Northside Achievement Zone a 'cradle to career' initiative to provide engagement, services, and supports to children and families in a 255-square-block area in Minneapolis MN. As part of NAZ's work, assessment of development from birth to high school graduation is being used to identify individuals needing supplemental supports, and to evaluate the effects of individual and group interventions. Early language development is one key element of this overall effort

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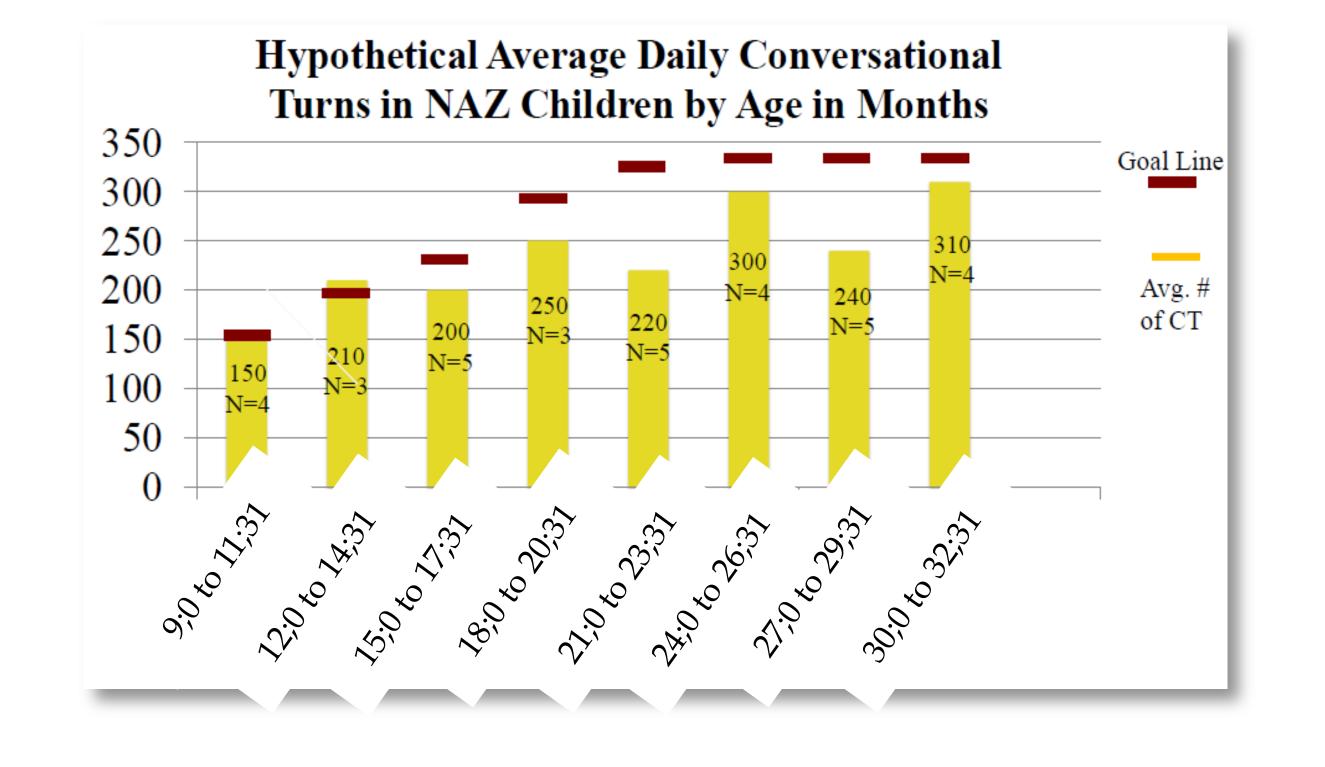
Reporting Formats

Results will be provided in two formats:

- 1) A written report to parents
- The role of parents in young children's language development
- Descriptions of the domains of language being measured
- Graph of child's performance, with agebased norms
- Text on child's performance compared to age-based normative scores



A graph depicting average scores for past quarter across the Zone and age-based norms (and, perhaps, historical data)



Research Question

- What is the technical feasibility of using LENA technology for measuring in-home parent language and behavior?
- o What logistical procedures are needed to get DLPs to and from children's homes and collect usable raw data?
- o To what extent are reporting formats (reports provided to families summarizing LENA Recordings) understandable and useful?

Procedures

- Request that NAZ Connectors recruit families, schedule and deliver DLPs, and retrieve DLPs for analysis for ~5 families per Connector
- Score and produce reports, then share results with Connector and child's family within 48 hours of collection
- Gather interview data from connectors on logistics and reactions to report formats and procedures

Findings

- LENA assessments -
- o 9 of 40 intended samples collected
- o 2 boys, 7 girls 7 to 42 months of age (M = 23.4 months)
- o Adult Word Count: 5521 18603 (M = 10,541), 4/9 "at risk" (more than 2 SDs below mean for age)
- Conversational Turns: 145-774 (M = 299), 3/9 "at risk"
- o Child Word Count: 474 3303 (M= 1431), 4/9 "at risk
- Logistics
- Biggest challenge scheduling and retrieving DLPs (2 20 days), providing reports on timely basis
- Withdrawal of consent from families
- o Adding drop-off/pick-up/feedback into NAZ staff duties
- Reports
- o NAZ staff able and willing to deliver reports on their own
- o Staff and parents described reports as "understandable"
- o Willingness to participate seemed to be affected positively by access to report and information, and by testimonials by NAZ staff and parents who had completed assessments previously