MISSION

Providence Talks proposes to do something never before attempted at the municipal level: to intervene at a critically early age, from birth to age three, to close the “30 million word gap” at a city-wide scale and ensure that every child in Providence enters a kindergarten classroom ready to achieve.

BACKGROUND

Providence Talks was developed based on research initially completed in 1995, by University of Kansas child psychologists Betty Hart and Todd Risley, who discovered that children from different economic backgrounds are exposed to vastly different levels of adult talk over the course of their early, formative years. They projected that by the time children from low-income backgrounds reach their fourth birthday, they will have heard approximately thirty million fewer words than their higher income peers. This gap is both evident and consequential on the very first day of kindergarten. This discovery in the context of a persistent, nationwide achievement gap in educational outcomes has long frustrated policy-makers and early childhood interventionists.

In an effort to remedy the issue at city-wide scale, the City of Providence launched Providence Talks. The program supports parents and caregivers in improving the language environments of their children at a time when brain development science indicates that language development is the most critical, with a goal of ultimately preparing them for academic success in kindergarten and beyond. This concept was the grand prize winner in Bloomberg Philanthropies’ 2013 Mayors Challenge, a competition to generate innovative ideas that solve major challenges and improve city life and have the potential to spread to cities worldwide.
OVERVIEW

The Providence Talks Professional Development Model is one of three service delivery models currently offered by the Providence Talks program to improve the language environment for children. The program realized early on that by only serving parents and children in their homes, they were neglecting to support a significant population of children who spend the majority of their day in the care of someone other than their parent.

In 2016, Providence Talks launched a comprehensive, first of its kind professional development series for early childhood educators that focus on improving the language development for children in these settings. The series is offered in both English and Spanish and features the use of our innovative technology to track, and measure, the language environment of classrooms.

RATIONALE

Currently, early childhood educators in both home- and center-based settings have inconsistent access to professional development, particularly as it pertains to language development for infants and toddlers. Providence Talks partners with these educators to focus specifically on the issues of early language development and its connection to kindergarten readiness.

The Professional Development Series aims to:

1. Improve the language environment of classrooms/homes;
2. Integrate the administration of reliable and valid measures of vocabulary development into their professional practice;
3. Partner with families to help parents understand the importance of early language development and how they as parents can integrate new techniques and activities in their homes.
THE MODEL

The series is 15 hours of face-to-face learning, including an hour long orientation and five 2-hour sessions, offered weekly for 6 consecutive weeks and two additional sessions, held one month after the final class. Participants complete one day-long recording before each session. During the session, they receive a comprehensive, individualized report detailing the language environment of their classroom. Additionally, class facilitators will have phone calls and on-site visits with participants in between sessions to offer support and guidance on implementation. Educators will receive an official credit of 20 hours of Professional Development that has been approved by the Center for Early Learning Professionals.

The Professional Development Series is aligned to the current Providence Talks implementation model and will include the same core components:

- **Use of innovative technology**- Educators will utilize LENA technology to measure their own progress in increasing Adult Word Counts, Conversational Engagement (Conversational Turn Counts) and minutes of electronic media within their center.

- **High quality curriculum**- The curriculum was developed by experts at Ready to Learn Providence and is aligned to RI Early Learning Standards, RI’s Knowledge of Competencies for early childhood educators and BrightStars, the state’s quality rating improvement system.

- **Coaching support**- In addition to the facilitated group coaching, participants will benefit from technical assistance by phone and in-person between sessions. An educator will offer hands-on modeling at the programs to support educators in applying the skills they’ve learned from the series into their practice.

<table>
<thead>
<tr>
<th>CURRICULUM WEEK</th>
<th>CONTENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orientation Session:</td>
<td><strong>Introduction and Overview of Providence Talks</strong></td>
</tr>
<tr>
<td></td>
<td>Participants complete a child roster and sign the Information and Informed Consent Form</td>
</tr>
<tr>
<td></td>
<td>Introduce the LENA device and explain its usage</td>
</tr>
<tr>
<td></td>
<td>Share “tips” for securing a valid, usable recording</td>
</tr>
<tr>
<td></td>
<td>Review policy for Stipends</td>
</tr>
<tr>
<td>Week 1:</td>
<td>Introduction</td>
</tr>
<tr>
<td>Week 2:</td>
<td>Effective Interactions</td>
</tr>
<tr>
<td>Week 3:</td>
<td>Environments &amp; Routines</td>
</tr>
<tr>
<td>Week 4:</td>
<td>Language Strategies</td>
</tr>
<tr>
<td>Week 5:</td>
<td>Books and Play</td>
</tr>
<tr>
<td>First Follow-Up-Week 9: (Four weeks following Week 5)</td>
<td>Identifying Progress</td>
</tr>
<tr>
<td>Second Follow-Up-Week 10: (One week after Week 9)</td>
<td>Teaching v Learning</td>
</tr>
</tbody>
</table>
Sample of LENA Data Report provided to educators at each session

**CONFIDENTIAL**

**Name:** RCT_B_PROV_MS_0062  
**ID:** RCT_B_PROV_MS_0062  
**Age:** 17 months

**PCTL Legend**  
- High: 75-99  
- High Avg: 50-74  
- Low Avg: 25-49  
- Low: 1-24

**Daily Book Reading**  
**Daily Minimum by Age**  
- Month 1-11: 10 min  
- Month 12-23: 20 min  
- Month 24+: 30 min  
**5 minutes per day as of 12/23**

**Daily Adult Words**  
Star goal was: 14695 words

**Daily Conversational Turns**  
Star goal was: 399 turns

**Daily TV/Electronic Sound**  
Avg Min: 120

**Hourly Adult Words on 03/04**

**Hourly Conversational Turns on 03/04**

**Hourly TV/Electronic Sound on 03/04**
RESULTS TO DATE

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Childcare Providers Served</td>
<td>155</td>
</tr>
<tr>
<td>Total Children Impacted</td>
<td>605</td>
</tr>
<tr>
<td>Valid Recordings Submitted</td>
<td>974</td>
</tr>
<tr>
<td>% of Providers Who Increased Either AWC* or CTC* PCTL as of 5th Recording</td>
<td>75% (92/123)</td>
</tr>
<tr>
<td>% of Children Who Increased LENA Snapshot Score (Comparing 1st to 2nd Snapshot)</td>
<td>63% (228/362)</td>
</tr>
</tbody>
</table>

*AWC—Adult Word Count, *CTC—Conversational Turn Count

Developmental Assessment Tools: Educators who participate in the series are trained to administer the LENA Developmental Snapshot. This assessment tool is completed three times during the course of the educator’s participation in the series to assess the developmental progress of each child in their care. The Snapshot is designed to gauge the child’s language developmental age and skills as compared to their chronological age. The Snapshot consists of 52 questions the parent/caregiver answers about the child’s expressive and receptive language skills.

LENA Developmental Snapshot (Minimum 2 Snapshots Completed):
Children are making significant developmental gains as a result of the intervention, on average moving from the 35th to the 45th percentile.

<table>
<thead>
<tr>
<th>Baseline (1st) Snapshot Average (N=362)</th>
<th>Post (2nd) Snapshot Average (N=362)</th>
</tr>
</thead>
<tbody>
<tr>
<td>35th PCTL</td>
<td>45th PCTL</td>
</tr>
</tbody>
</table>

As seen in the chart below, children are maintaining their developmental gains after the intervention ends.

(Minimum 3 Snapshots Completed):

<table>
<thead>
<tr>
<th>Baseline (1st) Snapshot Average (N=73)</th>
<th>Post (2nd) Snapshot Average (N=73)</th>
<th>Follow Up (3rd) Snapshot Average (N=73)</th>
</tr>
</thead>
<tbody>
<tr>
<td>30th PCTL</td>
<td>41st PCTL</td>
<td>41st PCTL</td>
</tr>
</tbody>
</table>
Adult Word Count (AWC) Progress - Comparison of Baseline to Final Regular (5th) and 6th (Follow Up) Program Recordings (N=116)

The adult word count, as measured by the LENA technology, refers to the number of words spoken in the classroom by an adult (person older than 15 years of age.)

<table>
<thead>
<tr>
<th>1st Recording Baseline AWC Average</th>
<th>5th Recording AWC Average</th>
<th>6th Recording AWC Average (follow up rec) (n=116)</th>
</tr>
</thead>
<tbody>
<tr>
<td>16,414</td>
<td>19,444 (14% increase)</td>
<td>20,074</td>
</tr>
</tbody>
</table>

When focused on participants who start below the 50th percentile, a subgroup which can benefit even more from an intervention like Providence Talks, we see an increase of 61% (Minimum 3 Snapshots Completed):

<table>
<thead>
<tr>
<th>1st Recording Baseline AWC Average (those starting below 50th PCTL, N=38)</th>
<th>5th Recording AWC Average (those starting below 50th PCTL)</th>
<th>6th Recording AWC Average (those starting below 50th PCTL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7,305</td>
<td>11,782 (61% increase)</td>
<td>13,515 (81% increase from baseline)</td>
</tr>
</tbody>
</table>

CONVERSATIONAL WORD COUNT

Conversational Word Count - The conversational turn count, as measured by the LENA technology, refers to the number of simple conversations between child & adult; one speaks (or in cases of young children, babbles or makes an utterance), the other responds within five seconds.

Conversations are recorded and analyzed using LENA technology. This data provides insights into the interactions between caregivers and children, highlighting areas for intervention.

PROVIDERS:

CTC Progress With Minimum 6 Recordings (incl. Follow Up), n=116

Providence Talks participants who complete at least 6 recordings are making CT gains. More importantly, follow-up recordings show participants are retaining the gains they made during the program.
COST ANALYSIS

A cost analysis of the Providence Talks Professional Development Series is outlined in the table below:

<table>
<thead>
<tr>
<th></th>
<th>Base</th>
<th>With Stipend</th>
<th>With Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cost per Provider</strong></td>
<td>$750.00</td>
<td>$950.00</td>
<td>$1,249.00</td>
</tr>
<tr>
<td><strong>Cost per Child</strong></td>
<td>$187.50</td>
<td>$237.50</td>
<td>$312.50</td>
</tr>
</tbody>
</table>

*These are projections based on previous enrollments. Estimated cost per child is dependent upon number of children in the care of the provider who meets eligibility criteria of the Professional Development Model.

By December 2017, Providence Talks will have offered the series ten times to providers across the City of Providence. Some factors to consider when analyzing the cost of the Providence Talks Professional Development Model:

- Cohort Size: Cohorts currently serve on average 10 providers; however, capacity can be developed moving forward to accommodate 12-15. This would, in theory, lower the cost.
- Child/Provider Ratio: depending on classroom size, this could influence the cost per child estimate
- Cost of technology and frequency of recording schedule
- Technical Assistance: frequency and reach will influence this total estimate

This cost analysis includes the following components:

- Recruitment Efforts
- Curriculum Development and Adjustment
- Data Entry
- Facilitation of Curriculum
- Technical Assistance & On-Site Modeling (Base offering)
NEXT STEPS:
The Providence Talks Professional Development Model is at a critical phase of implementation. Significant work has been done to develop a promising model and now is the time to bring that model to all eligible providers. The Providence Talks team has engaged in an intensive planning process and has developed the following key strategies for the next phase of implementation:

- Providence Talks will fund the training of additional facilitators, or, “credible messengers.” These facilitators will be largely pulled from providers who have completed the series themselves and can offer critical input and support to others.

- Providence Talks, in collaboration with Ready to Learn Providence, will develop and pilot a 2.0 model to expand upon the foundational skills taught in the original series. Participants who have completed the original series and wish to deepen their understanding and application of language-promotion strategies and techniques will be encouraged to participate.

- Providence Talks will develop the tools necessary to support early learning centers in their development of a quality improvement plan. Monthly outcomes aligned to quality improvement on the state’s quality rating system, BrightStars, will be developed in partnership with the center’s administrator or education coordinator. Quality improvement plans will focus on (5) key standards outlined in the BrightStars rating system and are aligned to the Providence Talks Curriculum.

They include:
- Teacher Qualifications
- Continuous Quality Improvement
- Curriculum
- Child Assessment
- Family Communication and Involvement
**Baseline:** The score reported on the first recording for a provider participating in Providence Talks.

**Conversational turn:** Simple conversations between child and adult; one speaks, (or in cases of young children, makes an utterance) the other responds.

**Daily word count:** The number of adult words heard by the child. In the case of Providence Talks, as recorded by the Digital Language Processor.

**Developmental Snapshot/LENA Developmental Snapshot:** The Snapshot is an assessment tool designed to gauge the child’s language developmental age and language skills. The Snapshot consists of a series of questions that the parent answers about their child’s expressive and receptive language skills. This tool is used to assess a child’s progress during their participation in Providence Talks.

**DLP:** Digital Language Processor - see “talk pedometer”.

**LENA Research Foundation:** A 501(c)(3) public charity located in Boulder, Colorado. LENA is an acronym for Language Environment Analysis. LENA provides Providence Talks with the technology used to capture the language environment of children enrolled in the program.

**LENA device:** See “talk pedometer”.

**LENA report/LENA feedback report:** A one-page summary analyzing the output from one day-long recording produced by a provider participating in Providence Talks. These reports also compare to previously completed recordings so that providers can view progress. Documents reading minutes as well as electronic/media noise. Differentiates between daily counts and “hourly counts” for families.

**Media exposure:** Number of minutes during a recording on the Digital Language Processor that the language environment includes the sound of television, radio or other media. Note that the DLP filters out this media/electronic noise in order to generate a more accurate representation of the child’s language environment, specifically engagement.

**Norm, national norm:** The number of adult words heard or conversational turns experienced at the 50th percentile for a child of a certain age, compared to a nationally-representative sample of children of the same age.

**Percentile:** Percent rank comparing the child to children of the same age.

**Rhode Island Early Learning and Development Standards:** Rhode Island’s standards for assessing and determining appropriate, age-level development in children. The Rhode Island Early Learning and Development Standards are intended to provide guidance to families, teachers, and administrators on what children should know and be able to do as they enter kindergarten.

**Talk pedometer:** The DLP measures the amount of talk in a child’s environment. It is a tiny wearable digital recorder with specialized software which provides families with feedback on their child’s language environment and how to improve it.

**Word gap:** The idea that children’s vocabulary skills are linked to their economic backgrounds. Children in low-income families hear dramatically fewer words than their middle and high-income peers. This early measure often sets them behind in school and beyond.
CALL TO ACTION

Providence Talks is committed to supporting the nation’s grade level reading goal. By prioritizing the language development of children in their critical brain development years, Providence Talks will support communities in their effort to improve reading proficiency outcomes for the nation’s most vulnerable children.

If you are interested in learning more about the Providence Talks Model, please contact the program office at 844-401-TALK • provtalks@gmail.com www.providencetalks.org