The families were individually recorded before and after a three-week exposure to ReadyRosie. Researchers analyzed the change in both the quality and quantity of language, using the following variables and seeing the following results:

- **Total number of words**: 80% increase
- **Total number and complexity of utterances (sentences)**: 40% increase
- **Total number of open-ended questions**: 25% increase
- **Total number of child responses**: 60% increase
- **Total number of commands/directives, like “no” and “put that down.”**: 10% decrease

This study is ongoing and will have final analysis and results in 2016.
ReadyRosie Evaluation and Research Project

Overview

ReadyRosie is a daily two-minute video program provided in both English and Spanish that can be delivered to a computer or mobile device and is intended for children at the pre-kindergarten age level. It was created by a team of educators from the fields of literacy, numeracy, early childhood development, and bilingual education. ReadyRosie is based on rigorous behavioral research, such as the vocabulary instruction research of Beck and colleagues (2002). Over 1000 videos have been created through partnering of expert field educators with filmmakers that show real families modeling early literacy and math conversations in real-world contexts.

The importance of training parents to engage in early conversations with their children prior to kindergarten has been highlighted by several prominent researchers (Hart & Risley, 1992, 1995; Hoff, 2003). The purpose of this project is to thus evaluate the ReadyRosie video resource for primarily low-income English- and Spanish-speaking mothers of diverse ethnicities living in various locations to provide a general basis for the effectiveness of the program in increasing quantity and quality of maternal speech to preschool-aged children.

Summary of ReadyRosie Pilot Evaluation Project

A team of researchers used a three-phase procedure to evaluate ReadyRosie and generate program evaluation reports to provide formative feedback. The goal of the study was to identify whether ReadyRosie exposure was increasing the rate in which the parent or child verbally responded and whether the nature of the responses were related to early learning and cognitive development. The families were anonymous and represented both native English and Spanish speakers.

Using an Apple iPad with a stand and four 30-minute sessions, the families were individually recorded before and after a three-week exposure to ReadyRosie. The participants interacted among themselves normally while being filmed and were later scored with an observation code that included how many verbal responses were given by parent and child per minute and whether they contained high quality language content. This process happened two times prior to ReadyRosie exposure and two times after ReadyRosie exposure. During the final visit, the parents completed an exit survey to document their unique findings upon experiencing ReadyRosie for the first time in this manner.

Overwhelmingly the film interactions showed all the families experienced an increase in their verbal responses overall with an added emphasis in math and literacy. While the quantitative data differed between individuals, the trend was unanimously positive in practice and in the perceived benefits expounded by the parents in the exit survey.

Summary of Current Evaluation Project

The current study is based on the pilot study with only slight modifications. The study will provide daily delivery of 15 ReadyRosie videos selected from the ReadyRosie video library over the course of three weeks to an experimental group of 20 families, and will compare these families to a control group of 20 families who do not receive the videos until after the second videotaping at each site.

Mothers will be videotaped playing with their child “as they normally would” using a standard set of toys in a structured play room at the designated sites for 30 minutes each.
Data analysis will involve analysis of both quality and quantity of language. It will measure such quality of language variables as maternal ability to direct the child and maternal guided questioning of the child. It will also explore such quantity of language variables as how frequently the mother speaks and how complex her speech is towards her child. Additionally, the study will involve administration of quantitative and qualitative surveys before and after treatment. These surveys will be used to quantifiy and probe how ReadyRosie is used, mothers’ background knowledge of language and confidence in language skills as well as how these variables are changed after ReadyRosie participation, and how ReadyRosie could be improved.

The current study is being conducted through the Penn State IRB process with several partnering sites in Texas and Ohio and we expect to have final results in the Spring of 2017. We anticipate the results being similar to the pilot study, but more robust and accurate because of the increased size of the intervention and control groups.