

Improving Teacher-Child Conversations in Preschool Classrooms: Effects on Teachers and Children

Sonia Q. Cabell, Laura M. Justice, Shayne B. Piasta, Stephanie M. Curenton, Alice Wiggins,
Khara Pence Turnbull, Anita S. McGinty, Jamie DeCoster, Lindsay D. Forston, and Yaacov Petscher

Preschool teachers received training on ways to promote children's language development. Researchers then compared their use of these new language-facilitation strategies with teachers receiving no training on this topic. They also measured children's language skills to see if the training made a difference.

Oral language is a critical precursor to children's reading success and is particularly important for preschool children coming from low-income families, who often enter school with lower language skills than their middle- and upper-class peers. Research has found that adults can promote preschoolers' language development by engaging in high quality conversations. Yet, speaking with children in ways that facilitate language growth seems to be neither intuitive nor natural to many preschool teachers.

A team of researchers, including research scientists in the Center for Advanced Study of Teaching and Learning, is working to identify efficient and cost-effective ways to improve teacher-child interactions. Their study examined the efficacy of one way to change preschool teachers' conversational behavior and its effects on children's language development over the course of the school year. The main findings of this study are reported in a series of three articles. This study was funded by the U.S. Department of Education's Institute of Education Sciences, and the Principal Investigator was Dr. Laura Justice (The Ohio State University).

The Study

This randomized controlled trial assigned 49 preschool teachers to one of two groups:

1. **Conversational Responsivity Training.** This group (25 teachers) received professional development on being a conversationally responsive partner to enhance children's language development. The training focused on two sets of strategies designed to promote children's engagement and participation in extended conversations across the school day. In a three-day summer institute and a one-day mid-year session, teachers were encouraged to use *communication-facilitating strategies*

designed to promote ongoing back-and-forth classroom conversations. These strategies included using a slow pace, following children's conversational lead, and asking open-ended questions. They were also trained to use *language-developing strategies* that provided children with exposure to advanced language models. These strategies included stressing and repeating words, expanding on children's statements, and extending children's ideas. A key overall goal of the training was to promote high quality conversations in which teachers and children take multiple turns.

Teachers videotaped themselves teaching twice a month during the study and received written feedback on their teaching from the research staff. In these videos, they demonstrated their use of specific conversational responsivity strategies with small groups of children over a seven-month period.

2. **Control.** The "business-as-usual" control group (24 teachers) received no professional development training. These teachers were required to videotape segments of their teaching on the same schedule as the other group.

The researchers randomly selected 330 children from across the 49 classrooms serving children from low-income backgrounds, for measuring and comparing the effects of the professional development.

The researchers used observational rating scales to measure teachers' strategy use. They used standardized tests to measure the children's language skills (that is, grammar and vocabulary) in both the fall and the spring of the school year. In addition, select small-group, play-based videos of teacher-child conversations were transcribed and coded to reflect naturalistic classroom language samples.

Language Development Strategies for Teachers

Communication-facilitating strategies:

- Welcoming interaction opportunities via looking expectantly and being warm and receptive.
- Using comments to cue additional turn-taking.
- Using questions to stimulate conversation.
- Facilitating peer-to-peer communication.

Language-developing strategies:

- Making words more salient using stress and/or repetition.
- Extending children's statements by providing additional information.
- Providing opportunities to talk about feelings, to project or pretend, or to talk about the past or future.

Findings

Effects on Teachers' Use of Strategies. The team found mixed results in terms of teachers' use of strategies. They found that the trained teachers used significantly more communication-facilitating strategies across the year than the control group teachers did, but there was little difference in their use of language-developing strategies. In other words, trained teachers were more adept at encouraging and involving children in extended conversations. Trained teachers asked more open-ended questions, followed children's conversational lead more often, and engaged children in more multi-turn conversations. Although trained teachers did not consistently use more language models, there was some evidence that they were better at extending children's comments and ideas.

Despite these positive changes, there is much room for improvement. Teachers' use of strategies was generally in the low-to-moderate range among both the trained teachers and the control teachers. Only half of the 1070 classroom conversations analyzed consisted of four or more turns and there were very few conversations that lasted ten or more turns (10%). When considering only the control group classrooms, there was a broad range in the quality and quantity of naturally occurring conversations.

Effects on Children's Language Development. The team also found mixed results in terms of children's language development. When carefully examining classroom conversations, children enrolled in classrooms with trained teachers spoke more frequently, used a

greater variety of words, and made lengthier statements than those in the control classrooms. However, improvement in teachers' use of strategies was not enough to significantly improve children's language skills over the course of the preschool year when measured by standardized tests of grammar and vocabulary.

When examining the standardized test results more closely, the teacher training did not have a uniform impact on all children. The majority of children in the study had low language scores to begin with, but the children with relatively higher verbal ability at the start of the year made improvements if they were in a class with one of the trained teachers. It may be that the children with greater verbal ability talked and initiated conversations more than other children and, in doing so, had more opportunities to practice using language. They may have also prompted increasingly advanced models of language from the adults with whom they interacted.

The researchers found that when teachers in either group used more strategies, children's growth in vocabulary was greater. In addition to sheer amount of strategy use, it seems that when teachers in either group concentrated their use of strategies within fewer conversations, this was related to increased vocabulary growth for children. This finding highlights the importance of how teachers use strategies in the context of classroom conversations.

Conclusion

These findings suggest that professional development focused on conversational responsiveness may be a valid means for improving teachers' capacity to engage children in high quality conversations. In turn, this training has potential to enhance children's language development. Yet the findings also point to the need for understanding additional ways to help teachers promote high-quality classroom conversations. It may be the case that teachers require more intensive support to truly change the nature of their classroom conversations in ways that have lasting effects on children.

A full description of this three-part study is published as follows:

Cabell, S. Q., Justice, L. M., McGinty, A. S., DeCoster, J., & Forston, L. D. (in press). Teacher-child conversations in preschool classrooms: Contribution to children's vocabulary development. *Early Childhood Research Quarterly*. doi: 10.1016/j.ecresq.2014.09.004

Cabell, S. Q., Justice, L. M., Piasta, S. B., Cumenton, S. M., Wiggins, A., Pence Turnbull, K., & Petscher, Y. (2011). The impact of teacher responsiveness education on preschoolers' language and literacy skills. *American Journal of Speech-Language Pathology, 20*, 315-330. doi: 10.1044/1058-0360(2011/10-0104).

Piasta, S. B., Justice, L. M., Cabell, S. Q., Wiggins, A. K., Pence Turnbull, K., & Cumenton, S. M. (2012). Impact of professional development on preschool teachers' conversational responsiveness and children's linguistic productivity and complexity. *Early Childhood Research Quarterly, 27*, 387-400. doi: 10.1016/j.ecresq.2012.01.001.