

Increasing infants' cooing and babbling

What does research tell us about the effects of adult verbal and vocal contingent responsiveness on increases in infant vocalizations?

When an adult speaks or otherwise vocalizes in response to an infant's coos and babbles, it tends to reinforce the baby's behavior so that he or she vocalizes even more.

Researchers at the Center for Early Literacy Learning (CELL) analyzed 22 studies of adult verbal and vocal behavior (imitating the infant's sounds, commenting, making other nonverbal sounds, etc.) that was in response to an infant vocalizing. Their goal was to see if there were any variations in the effects of different kinds of adult vocalizing on infants' vocal production.

The CELL researchers also sought to evaluate whether other kinds of adult social behavior—such as smiling, making eye contact, touching—when used in combination with vocal responsiveness, might also be related to increases in infant vocalizations.

While the research findings showed that each of the different kinds of adult verbal and vocal responsiveness evaluated had positive effects in terms of increasing infant vocalizing, one of them—adult imitation of infants' vocalizations—had the greatest effect. The results also showed that smiling and looking at the infants added to the reinforcing effect on increases in child vocal behavior.

Among the implications for practice are to begin by using imitation to increase infant vocalizations, then follow with other kinds of adult responses including different verbal responses, introduction of new sounds and words, expressions of praise, and a variety of engaging social behaviors to expand a baby's vocal production.



When your infant coos and babbles, respond both verbally and socially (with good eye contact, smiles, touches, and other social reinforcers) to encourage continued vocal interaction.

This *CELLnotes* summarizes findings reported in Dunst, C. J., Gorman, E., & Hamby, D. W. (2010). Effects of adult verbal and vocal contingent responsiveness on increases in infant vocalizations. *CELLreviews* 3(1), 1-11.

Acting on the Evidence

Download free, two-page *CELL*practices guides in versions for parents or practitioners at www.earlyliteracylearning.org

Staff of CELL have created a number of practice guides especially for parents and early childhood practitioners to encourage putting this research evidence to use in home, community, and classroom settings. All of the two-page practice guides listed below are available for free download on the CELL project web site: www.earlyliteracylearning.org. At this web address you can also find interactive posters called *CELL*pops and multimedia practice guides such as videos that illustrate practices supported by this research.

The collage features six practice guide covers:

- Babble On**: "Especially for parents of infants! ... What is the practice? ... How do you do the practice? ... How do you know the practice worked?"
- Say It Again, Daddy!**: "Take a look at more of baby's babbling fun ... Take and her father are playing together on the floor with her favorite toys and stuffed animals. Dad describes what Bronco did before she says, 'He talks to her about all that going on. Dad can pretend sound the book back and now you're playing with the animals. He says 'Go' to the sounds. She likes her feet to respond what her dad says. Whenever she sees the monkey playing with the animals, she says 'Go' to the sounds. He gets her to make a noise. The book and toys play a beautiful activity for Taylor. She watches, listens, and Mom to find the sounds her dad makes."
- Happy Talk!**: "A few months from October since 18-month-old Bronco has learned to say 'da da', 'ga ga', 'ba ba' and other babbling sounds. She loves to talk to her dad after waking, something something the car say over and over. Bronco's mother plays a sound game with her when she goes into her room to pick her up. She looks at Bronco and says, 'Has Bronco been talking again? What are you saying?' He echoes her 'da da' and 'ga ga' babbling, again, again, again. The sound game is being played with her daughter's friend. 'You see, I'm good at saying 'da da. Say 'da da' again?' After three or four 'da da' and 'ba ba' sounds of talking, Bronco says, 'Can you say 'ga ga' go?' Bronco tries to repeat the sounds. She doesn't always get it right, but she seems pleased with her effort."
- Infant Cooing Activities**: "Especially for practitioners working with infants! ... What is the practice? ... What does the practice look like? ... How do you do the practice? ... How do you know the practice worked?"
- After-Nap Cooing Game**: "Take a look at more infant cooing activities ... After-nap cooing game ... The new sound, he does not always get it right but he certainly loves the sound."
- Time To Play**: "Time to play ... The new sound, he does not always get it right but he certainly loves the sound."

Especially for PARENTS

- Feeding Frenzy
- Babble On
- Oohs and Aahs
- Talk to Me...In Parentese

Especially for PRACTITIONERS

- Infant Cooing Activities
- Infant Babbling Activities
- Talking Pointers
- Animal Sound Games