One Diaper at a Time

Re-Envisioning Diapering Routines With Infants and Toddlers

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Abstract

A large portion of an infant's or toddler's day involves bodily care routines, including diapering. Tuning in to the uniqueness of a child's individuality during diapering by responding with sensitivity, encouragement, and in an unhurried manner, sends a powerful message to the child about his or her body, bodily functions, and crucially, that the caregiver enjoys being with the child. This article highlights a program practice, diapering, to describe and re-envision high-quality caregiver—child interactions and their associations with child well-being and involvement. The author explores how missed opportunities during diapering can be transformed from a rushed routine into an opportunity to enhance child well-being and involvement.

This article highlights how diapering routines in infant and toddler non-parental care settings are opportunities to have a positive developmental impact through the interactions that occur between a caregiver and child. Typically, diapering is completed quickly, on average in less than 3 minutes (Laurin, 2017). This fast pace does not allow time for high-quality caregiver interactions, nor does it accommodate the slower pace infants and toddlers require for absorbing and processing information and communication. Diapering provides a rare one-on-one moment in the day-to-day experiences of group care. However, this opportunity is mostly eclipsed by the custodial elements of the routine, primarily a focus on disease prevention and hygienic practices.

To help to re-envision diapering as an opportunity, the following vignette describes Faith's experiences with Amber, her caregiver. In a two-pronged approach, this anecdotal description of an actual diapering observation makes use of questions from (1) The Newborn Behavior Observation (NBO; Nugent, 2015), to illustrate the child's perspective; and (2) The Parenting Interactions with Children: Checklist of Observations Linked to Outcomes (PICCOLO; Roggman, Cook, Innocenti, Norman,

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& Christiansen, 2013), to describe the caregiver's interactions including affection, responsiveness, encouragement, and teaching. These tools help to reframe diapering and the associated interactions from the child's point of view and to highlight the opportunities to build the caregiver—child relationship. This reframing gives rise to recommendations for how caregivers can re-envision diapering as an opportunity to enhance the quality of the child's experience.

Infant and Toddler Program Quality

A large body of research documents that the quality of early care and education programs matters for short-and-long term outcomes for all children (NICHD Early Child Care Research Network, 2002, 2005; Vandell et al., 2010). Young children are experiencing out-of-home care at high rates. With 60% of 2-year-olds and 50% of infants spending an average of 30 hours per week in non-parental care, the trend for early childhood care services by families across all socioeconomic circumstances has increased dramatically (Horm, Hyson, & Winton, 2013). Quality has been found to be especially important for children growing up in poverty, and a high percentage of infants and toddlers living in poverty are in non-parental care settings (Zaslow, Tout, Halle, Whittaker, & Lavell, 2010). High-quality early care for children living in poverty has an important buffering effect that positively and powerfully influences all aspects of early development (Horm, Norris, Perry,



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Chazan-Cohen, & Halle, 2016; Yazejian et al., 2017). Thus, enhancing the quality of all group care settings is important for all children and families.

Understanding infants' and toddlers' experiences at the individual level in non-parental care is critical for improving the day-to-day experiences of children in non-parental care and has implications for caregiver professional development and training in the field of early childhood education. Pawl (1990) explained:

Most vital...is that the infant or toddler is cared for in ways that promote his feeling effective, respected, and understood much of the time. If this occurs both with parents and with caregivers, then we have far less about which we must be concerned. (pp.1–5)

More than 25 years later, the reality for many infants and toddlers in non-parental care is that the quality is less than ideal. Research on infants' and toddlers' experiences in group care indicates, in general, the quality of care is in the low to mediocre range, with high-quality care being the exception (Lippard, Riley, & Hughes-Belding, 2016). This fact is especially troubling for children living in poverty because, as noted above, high-quality early care acts as a buffer and can positively influence early development (Horm et al., 2016).

Qualitative studies are needed to shine light on the lived experiences of infants and toddlers to improve the quality of care (Horm et al., 2013). Also, further research is needed to provide vital information about optimal teacher characteristics and attributes that promote positive development and learning for infants and toddlers in group care (Horm et al., 2013). Leavitt (1994) noted that important meanings are missing about

the relational experiences in group care when context and content information is absent. Information on caregiver—child interactions, relationships, curriculum implementation, child well-being, and involvement in the infant and toddler early childhood professional literature is not well developed and is characterized by gaps in the knowledge base.

A frequently occurring program practice, diaper-changing routines provide an opportunity for rich, reciprocal caregiver—child interactions. Highly important in the daily life of children according to social psychology researchers, and at the center of infant and toddler care (Addessi, 2009) are the caregiving routines, defined as the repeated, sequence of regularly followed predictable actions.

Routines

Despite a number of researchers and professional organizations that advocate and emphasize individualized care routines as important (e.g., Copple, Bredekamp, Koralek, & Charner, 2013; NAEYC, 2009; Zaslow et al., 2010; ZERO TO THREE, 2008), information highlighting the specific elements of high-quality routines with infants and toddlers is sparse. In the developmentally appropriate practices (DAP) literature, routines, including diapering, are highlighted as an opportunity for building teamwork by inviting an infant's attention and cooperation in the experience (Copple et al., 2013). However, in practice, approaching diapering with a mindset that views the infant as a team participant is not typical of diapering among classroom staff.

Theory also highlights the importance of routines and the associated adult-child interactions. Bronfenbrenner's (2001) theoretical foundation recognized the importance of high-quality caregiver practices and the individualized, momentto-moment care across context and time. Key ingredients in supporting infants' and toddlers' optimal development and learning require regular, consistent interactions in the immediate environment. Bronfenbrenner (2001) referred to these timely, consistent interactions between persons as proximal processes. For example, when a child's cooperation and participation in the diapering routine are invited, opportunities for high levels of back-and-forth interactions between the child and caregiver can occur. Thus, infant and toddler learning occur within the context of high-quality relationships that take time to allow for "infantled interactions, observant, reciprocal, and reflective caregiver responses" (Recchia, Lee, & Shin, 2015 p. 101), where both caregiver and child are mutually involved.

With 80% of a caregiver's time focused on daily routines, attention to structuring high-quality proximal processes are important. A caregiver's attitude—experienced by the child through the caregiver's ability to pay attention to and interact with a warm tone of voice, smiles, and positive responses to a child's interest and bid for social interaction—will directly affect the positive or negative experiences a child might have (Gonzalez-Mena, 2002). Between a child and a caregiver, routines are the anchored moments throughout the day. Routines on the whole provide important repetitive, sequenced

episodes that help the child's biological and regulatory rhythms adapt to the day-to-day demands of the social environment (Emiliani, 2002). Routines inform a child's sense of time and space, long before abstractions of these concepts develop. Routines include napping, eating, sleeping, dressing, diapering, arrival, departure, transitions, brushing teeth, and washing. Inseparable from infant and toddler programming curriculum, routines are an important part of the program presenting ideal situations for promoting a child's involvement, well-being, learning, and self-regulation (Laurin, 2015). By tuning in to the uniqueness of each child with sensitive, responsive interactions, the child absorbs a powerful message about her body, and bodily functions, and most important, that the caregiver enjoys being with the child (Laurin & Goble, 2018; Tardos, 2016).

Diaper Changes

As one of the first cumulative experiences for infants and toddlers, diaper changes occur an average of 5,000 times in the first 3 years and provide an easily observed, bounded routine for collecting vital information about the context and content of what is happening with the child and caregiver (Gerber, 2000; Lally, 2013). The intimacy of diapering becomes an opportunity, when unhurried, for a caregiver to listen, to observe, and to pay close attention to the actions of infants' and toddlers' (Laurin & Goble, 2018; Tardos, 2016). However, in reality, diapering routines are typically fast-paced (Laurin & Goble, 2018), with caregivers frequently missing opportunities for rich learning and language experiences with infants and toddlers that do nothing to "tether conversation to the real world" (Alter, 2017). Similarly, limited talk and interactions (Degotardi, 2010; de Schipper, Riksen-Walraven, & Geurts, 2006; Powell & Goouch, 2012), during caregiving routines primarily emphasize instructional content and directing child behaviors. Overall, diapering is typically approached as a custodial task (Venn & Wolery, 1992). Researchers have suggested that the limited talk during routines is attributed to a number of possibilities including caregiver embarrassment and self-consciousness, a lack of knowledge and experience about how to interact during care routine, and a lack of awareness about the importance of sensitive interactions to support optimal healthy development with infants and toddlers (Norris & Horm, 2015; Powell & Goouch, 2012).

Faith and Amber: A Diapering Vignette

The next paragraph describes an actual diapering interaction based on an actual classroom observation of Faith, a toddler, and her caregiver, Amber.

Faith, 24 months old, sits on the tiled floor in her infant—toddler classroom with an array of plastic cups scattered around her. Her experiment of moving cotton balls into different cups has absorbed her attention for more than 10 minutes. With precision, she begins to fill another cup deliberately removing cotton balls one by one into the cup she is holding.



With 80% of a caregiver's time focused on daily routines, attention to structuring high-quality proximal processes are important.

Faith's caregiver, Amber, on her way to diaper another child, gives Faith a verbal warning to help her to transition by announcing to Faith that her diapering turn will be next. A few minutes later, Amber, returns to collect Faith for her diaper change. Faith, now standing, walks hand-in-hand with her caregiver through the latched door to the diaperchanging area. Amber slides the stairs out beneath the changing table for Faith to climb up to access the change table surface. Counting, "One, two, three, four, and five!" Amber announces the numbers with each step as Faith climbs. "How many steps did you climb?" asks Amber. Not responding to Amber's question, Faith reaches hold of Amber's hand for extra support at the top step.

Removing a pair of latex gloves from the box nearby, Amber begins counting the fingers on the gloves, making sure that Faith, standing, is watching, "What comes after one?" "It's two, then three, then four, and five!" Amber explains with enthusiasm. Instead, Faith is interested in the lanyard around Amber's neck, and reaches to touch the keys on Amber's bright yellow cord. Faith's curiosity is short-lived when Amber pushes Faith's hand away and asks, "Are you ready?" Without waiting for Faith's response, Amber repositions Faith into a supine position on the diaper-changing table and then begins removing Faith's pants.

Faith is interested and curious about her surroundings; she reaches for the diapers stored in cubbies sectioned by diaper size beside the changing area. Amber redirects Faith's interest away with the comment, "Those are Caleb's. You wear a size 4." Amber removes a size 4 diaper from another cubby, proceeds to rapidly remove Faith's soiled diaper then, quickly, replaces it with a clean one. Gazing at the mobile overhead, Faith points to the balls and says, "Ball." Several seconds pass before Amber notices and responds



Routines include napping, eating, sleeping, dressing, diapering, arrival, departure, transitions, brushing teeth, and washing.

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to Faith's pointing finger and vocalization, "Yes, ball." "Where is the red ball?" continues Amber. Not waiting for Faith's response, Amber asks another question, "Which one is the blue ball?" Moving on with her task, Amber removes a wipe from the package and swoops in to wipe Faith's nose. Startled, and resisting with swift head turns from side-to-side, Faith whimpers and makes an effort to sit up. Amber holds the child down to finish wiping her nose then quickly lifts Faith to standing and pulls her pants up.

Faith attempts to touch the balls on the mobile hanging above her head, but Amber gives her a quick hug before lifting Faith down to the floor. "Time to wash your hands. Do you want the ABC song?" inquires Amber and begins singing before Faith responds. Standing in front of the child-level sink, Amber hovers over Faith, reaches to pump soap from the wall dispenser, takes hold of Faith's hands then begins rubbing them together vigorously with soap, while singing the ABC song. Shortly after, her hands washed, rinsed, and dried, Faith is led through the diaper-changing gate to the play area. Amber drops Faith's hand, turns her back, and approaches another child to diaper. Faith's diapering is finished. (Laurin, 2017)

During the diapering interaction, the caregiver demonstrated many positive behaviors such as giving a verbal warning prior to the transition to diapering. However, there are missed opportunities for in-the-moment reciprocal, back-and-forth interactions between Amber and Faith.

From the Child's Perspective

Imagining this diapering routine from the child's perspective provides the reader an opportunity to "think as if you are the child" (A. Tardos, personal communication, December 2014). By doing so, the caregiver steps into the child's experience,

while at the same time suspending one's own frame of reference; this is a state of mind that goes beyond simply responding to the child. If adults could step into Faith's little shoes, suspending for a moment their own thoughts, feelings, and urges to complete the task quickly, what might they realize that Faith wants to tell adults about her diapering experience with Amber?

As part of his iconic work with families and newborns, Nugent and colleagues (2007) developed the NBO, a tool to facilitate and strengthen parent relationships with their newborns. Although the NBO was developed for observing infants from birth to 3 months old, elements of this tool are useful to the discussion about this diapering vignette. Some noteworthy points about the NBO give insight about Nugent's contribution to the literature in identifying the uniqueness of and individual differences between babies. It is important to note that Nugent, like his mentor Brazelton, argued that infants are competent and fully responsive human beings with individual personalities from birth. For example, infants initiate communication in many ways and are innately motivated to engage in interactions with others. Essentially, the NBO tool sensitizes parents to the capabilities and individuality of their child to promote attachment and a positive relationship. With that in mind, the infant is a catalyst or teacher to family members for relationship building; parents are asked to imagine the infant's story, to give voice to the infant's needs through narrative, as part of the NBO observation.

Similarly, inviting caregivers to think about how infants and toddlers experience care and what infants and toddlers convey in their verbal and nonverbal expressions is worthy of exploration to support relationship building in diapering. Questions from the NBO guide the next section of this article to explore and give voice to Faith's diapering experience with Amber. Giving voice to Faith's imagined experience helps the reader visualize Faith's capacities and where she may have benefitted from additional caregiver support in the diapering relationship. (Faith's perspective is outlined in Box 1.) Next, an analysis based on dimensions of caregiver affection, responsiveness, encouragement, and teaching is used as a guide to re-envision Faith's diapering experience as an opportunity for enhanced interaction with her caregiver.

Caregiver Affection, Responsiveness, Encouragement, and Teaching

The caregiver's interactions in this vignette can also be reimagined using items borrowed from the PICCOLO (Roggman et al., 2013). The PICCOLO is based on the parent attachment literature to support a strengths-based approach to examining parenting behaviors. The tool has successfully been used in child care settings (Lippard et al., 2016; Norman, & Christiansen, 2013; Roggman et al., 2013) to observe caregiver interactions with children. Its constructs of affection, responsiveness, encouragement, and teaching are useful to frame a re-envisioning exercise of Amber's interactions with Faith. A brief description of each construct follows:

Box 1. From the Child's Perspective: Imagining Faith's Experience of her Diapering With Amber

"What I like and prefer at this time, and the cues I use to tell you"

- Did you notice how engaged I was in my task with the cups and cotton balls?
- Verbally acknowledging my effort and focus will help me to stay more engaged with my play.
- I like holding your hand when we walk to the diaper changing area.
- I like that you walk at my pace and hold my hand gently.
- I prefer to pull the stairs out from beneath the diaper table.
- In addition to counting, please comment on my coordination, balance, motor ability, and how carefully I climb, using both my hands to guide me because these themes relate to my body and what I am doing in the moment.
- I am glad you give me time to master the stairs and do not hurry me.
- I would prefer to move myself to lie down on the change table. If you ask me to do this I will most likely cooperate.
- I like to help you by taking a diaper out of the cubby and holding it for you.
- I enjoy looking at the patterns on my diaper while I am holding it for you.
- I was trying to engage you in conversation when I was pointing and said, "Ball," but you missed my intention and, instead, asked me questions about colors I do not know yet. Instead, you could acknowledge how much I love balls right now and how I played with the cotton balls earlier.
- I love getting hugs from you! This makes me feel loved and gives me a sense of belonging.
- I am ready to try to get my own soap and rub my hands together. I may not get it right, but I like to "do it myself" first before you help.
- Most of the time I don't mind the ABC song, but I prefer when you talk to me about the soap, the water, the bubbles, and the towels.

"What I find difficult at this time, and the cues I use to tell you"

- It is hard work climbing the stairs, but I enjoy this motor movement. However, when you count the stairs as I climb it distracts me from concentrating on my task.
- When I reach out to touch your keys on the lanyard around your neck, I
 am demonstrating curiosity and interest in you. When you brush my hand
 away, it sends a powerful message that my interests are not important.
- Please give me time to adjust my body when you move me from standing to supine.
- I feel like I am falling when you move me too quickly into the supine position and I do not have time to prepare myself to do this.
- If you let me stand, and it is safe, I can begin to push my own pants down.
- When I reached into the wrong cubby for a diaper, I was really trying to help you get one of my diapers ready because I knew this comes next in my diapering routine.

- I know a lot about the sequence of steps in diapering because I have experienced diapering so many times, so I can be helpful and participate.
- I can lift my bottom to place a diaper beneath if you ask and give me time to do this.
- I process and move more slowly than you do, so please give me time to shift my attention and my body.
- I find it difficult when you swoop in to wipe my nose. It startles me because I am unprepared.
- Sometimes I like to climb down the stairs and push them in.
- I find it difficult when you grab my hands quickly and rub them together so hard. I feel your hurry through the way you touch me.

"Ways in which you can help me at this time"

- You can help me by noticing my interest in your keys and lanyard and giving me information about these objects.
- I love keys! I notice my parents have keys, too, and I like to touch them.
- You can help me by allowing time for my response to your question, "Are you ready?" before moving me.
- Allowing me to open the cupboard and slide the stairs supports my initiative with your guidance.
- You can help me by giving me time to master the stairs and to appreciate my motor skills.
- Allowing me to trust you, by giving me your hand at the top of the stairs and guiding me over the top step onto the change table.
- You can help me by talking to me about what you are doing, what comes next, and paying attention to my attempts to engage you in the relationship through my sounds, words, and pointing. This is an enjoyable experience for me.
- You can let me know that you need to wipe my nose, that there is mucus in my nose, then, give me a moment to get ready or even let me attempt to wipe my own nose.
- Ask me if I want to climb down the stairs and slide the stairs back under the change table.
- You can allow me to attempt to wash my own hands because I am becoming familiar with the sequence of hand washing because I have had my hands washed hundreds of times.
- You can help me by letting me try hand washing on my own at first, then help me to make sure I have cleaned them enough.
- After diapering, please make a comment about our nice one-on-one time together. It is very special for me and one of the few times in the day when I get you all to myself!

Newborn behavior observation (NBO) questions developed from Nugent (2015). Subtext communication examples developed by Laurin (2017).

- Affection. Affection is caregiver behaviors that convey warmth, positive regard, and a fondness for the child.
 Research indicates caregivers' demonstrating warmth, enjoyment, and physical contact positively influences a child's well-being, cooperation, and positive child behavior (de Schipper et al., 2006).
- Responsiveness. Responsiveness defines how well a child's cues, emotions, words, interests, and behaviors are attended to by the caregiver. For example, do caregivers change pace and activities to meet the child's interests or needs, or follow what the child is trying to do, and respond to the child's words or sounds? Timely, responsive caregiving is a strong predictor of attachment security



Diaper changing and other toileting routines are often undervalued and not approached as a central element in infant and toddler classroom care.

and is associated with language and cognitive outcomes (Norman & Christiansen, 2013; Ritchie & Howes, 2003).

- Encouragement. Encouragement broadly encompasses
 how well a caregiver supports a child's initiatives, choices,
 independence, and creativity (Norman & Christiansen,
 2013). For example, waiting for a child's response after
 making a suggestion and supporting exploration, effort,
 skills, and child curiosity are positively associated with
 child behaviors, well-being, and cooperation, (Roggman
 et al., 2013).
- Teaching. Teaching is defined as cognitive stimulation, providing explanations, initiating conversations, joint attention, and shared play (Fuligni & Brooks-Gunn, 2013; Hart & Risley, 1995). Does the caregiver talk about the environment, ask questions, respond to the child's vocalizations, explain reasons for something to the child, and label objects or actions? Caregiver teaching behavior is an important element of language and cognitive development for infants and toddlers (NICHD Early Child Care Research Network, 2000).

See Box 2 for a re-envisioned diapering experience using the PICCOLO constructs.

Re-Envisioned Diapering Vignette

After considering the child's point of view and how the caregiver could enhance affection, responsiveness, encouragement, and teaching, re-envision the original observed diapering experience:

Faith, 24 months old, sits on the tiled floor in her infant and toddler classroom with an array of plastic cups scattered around her. Her experiment of moving cotton balls into different cups has absorbed her attention for more than 10 minutes. With precision, she begins to fill another cup, deliberately removing cotton balls one by one into the cup she is holding.

Faith's caregiver, Amber, on her way to diaper another child, gives Faith a verbal warning to help her to transition knowing that her diapering turn will be next. A few minutes later, Amber returns to collect Faith for her diaper change. "Are you ready?" she asks, waiting for Faith's response. Faith, now standing, walks hand-in-hand with her caregiver through the latched door to the diaper-changing area. Knowing Faith likes to pull the sliding stairs out from the cupboard, Amber opens the door, and together they pull the stairs in place. Now Faith is ready to begin climbing. She steps nimbly up the stairs, then holding the sides with two hands she carefully makes her way to the top. Amber watches closely, ready to offer her help should Faith require it, but Amber knows how much Faith enjoys the satisfaction of mastering the stairs on her own. Offering words of encouragement, Amber comments on Faith's coordination, balance, and strong legs that help support her climbing. "You are managing on the stairs so well, and your strong legs climbed all the way to the top! I noticed how carefully and safely you climbed the stairs, holding on with both hands." At the top step, Faith is ready for Amber's help and reaches with her hand to grasp Amber for extra support as she climbs onto the surface of the change table. She meets Amber's eyes in a mutual gaze and beams with a big wide smile of satisfaction.

As Amber removes a pair of latex gloves from the box nearby, she pauses and follows Faith's interest in feeling them because she is fascinated with the texture. Sometimes, Faith even tries on a glove before she is diapered. This time Faith is interested in Amber's keys hanging on a lanyard around Amber's neck. Faith reaches to touch the keys and makes them jingle together. Following Faith's interest, Amber responds with descriptive information about the keys, describing what they are for, then, knowing Faith's mother also wears keys on a lanyard, she uses descriptive talk to make this association. All of this happens in a casual conversational style with Faith.

Now it is time to move on with the diapering, "Are you ready?" Amber waits for Faith's response, pausing, holding her hands out to signal that she is ready to help Faith to the supine positon on the change table. Undressing Faith, Amber talks to the child about what she is doing, providing rich language information embedded in the concrete actions of the diapering relationship. Essentially, Amber is tethering conversation to in-the-moment activities that hold meaning for Faith. Always interested and curious about her surroundings, Faith reaches for the diapers stored in cubbies

Box 2. Re-Envisioning Faith's Diapering Experience Through the Lens of Caregiver

The caregiver should focus on affection, responsiveness, encouragement, and teaching.

Affection—warmth, physical closeness, and positive expressions toward child

- "I see you are ready, do you want to hold my hand?"
- "That was such a nice big hug we shared together!"
- "Let's share a high five for that."
- "I see that you were ready to have your diaper changed when I came to get you."
- "I'm smiling at you because you are very special to me."

Responsiveness—responding to child's cues, emotions, words, interests, and behaviors

- "I am going to change your diaper soon." "Are you ready?" "Yes, you may play with the cups and cotton balls after your diaper is changed." "I'll put them here for you."
- "I see you are interested in the lanyard and keys around my neck."
- "Do you want to touch them?" "You are making the keys jingle together, do you like that sound?"
- "I remember your mother wears keys around her neck too, just like I wear mine."
- "Are you ready to lie down on the diapering table?"
- "Do you want to stand or lie down to have your diaper changed?"
- "What a nice big smile you gave to me." "You must be very happy."
- "You remembered those are Caleb's diapers. They are much bigger than your size because Caleb is 3 and you are 2 years old."
- "See, your diapers are in the cubby *beside* Caleb's diapers." "Can you find your diapers and hold one for me?"
- "I see you are holding your diaper and looking at the zebras."

Encouragement—active support of exploration, effort, skills, initiative, curiosity, creativity, and play

- "I see that you are very focused on your task, Faith!" "You are so engaged in playing with the cups and cotton balls." "I think you like this task a lot." "I have some other objects you might like to put in the cups."
- "That's it, pull harder, there you go, you pulled the stairs out!" "Now you can climb."
- "You are managing on the stairs so well!"
- "I see how strong your legs are to climb the stairs all the way to the top!"
- "I notice how much you like to climb the stairs all by yourself, you did it!"
- "I notice how carefully and safely you climb the stairs, holding on with both hands."

- "Thank you!" "I see you are helping me, you are lying down and ready to have your diaper changed."
- "Thank you for helping me!"
- "That's it, you are wiping your nose with the wipe, it's all clean now, hurray!"
- "You know where the towel goes; you put it in the trash all by yourself, well done!"

Teaching—shared conversation and play, cognitive stimulation, explanations, and questions

- Faith, "I see you are working hard filling the cup to the very top with cotton balls."
- "You needed a lot of cotton balls to fill the cup to the top."
- "Look, the red cup is empty now and you filled the blue cup, it is full."
- "These are my keys for opening the cupboard where I keep the toys and supplies."
- "Look how shiny the keys are. Can you think of another shiny object that you like to play with?"
- "Can you find the small key?" "Yes, it's that one." "See this is the big key for my car."
- "I'm going to change your diaper because you had a big pee this morning."
- "Look, the line is blue on your diaper. That tells me that your diaper is wet."
- "I see the zebras are black and white on your diaper, just like the zebras you played with this morning."
- "You have mucus in your nose, and I need to wipe it." "Would you like to try first?" "Like this, with the wipe."
- "Yes, I see the red ball you are pointing to. It's red just like the red shirt you are wearing today, and my shirt is red, too."
- "The blue ball is the same color as your pants. Look, I am wearing blue pants, too!" "We are wearing the same colors today!"
- "We rinse our hands first, there you go, do you like the feel of the water?" "It's a bit *cold* today, let me make it *warmer* for you." "I can see you like playing with the bubbles the soap has made."
- "Rub, rub, rub your hands, make them nice and clean, wash the germs away, HURRAY!"
- "Last of all we need to dry our hands with the paper towel. Here is a towel for you to use."
- "Do you remember where to put the towel when we are all finished?" "Yes, you do!"

PICCOLO dimensions from Roggman, Cook, Innocenti, Vonda, & Christiansen (2013).

Subtext communication examples developed by Laurin (2017).

sectioned by diaper size beside the changing area. Noticing this, Amber gives information to Faith about Caleb's diapers, and invites Faith to find her own diaper cubby to remove and hold a diaper to help. Amber invites Faith to lift her bottom so she can remove the soiled diaper and replace it with a clean one. She talks to Faith about the pee in her diaper that is making her diaper so wet. Glancing at the mobile overhead, Faith points to the balls and says, "Ball." Amber promptly responds to Faith's pointing finger, giving Faith

information about the color of the balls and connecting this information by pointing to the colors of clothing that they both wear. Amber does this slowly and at the pace of the child, so Faith has time to absorb this new information.

Noticing Faith's nose is in need of a wipe, Amber offers a wipe to Faith so she can attempt to do this task on her own. Amber follows up with another wipe, giving time and information so Faith can expect this to happen. All the while, she

offers encouragement because she knows Faith's efforts are important for her development. Now standing, Faith tries to pull up her pants, but this is difficult and she requires help, so Amber facilitates the task. Again, during hand washing, Faith knows the sequence and makes an effort to follow Amber's guidance. Amber asks timely questions that guide Faith's tasks for a successful experience. Knowing Faith will go through the motions successfully, Amber then finishes the task to ensure hands are clean. She does this with a gentle touch and talks with Faith about returning to play with the cups and cotton balls. Her diapering finished, Faith is happy, and she smiles at Amber who returns the smile and gives Faith a hug before guiding her back to resume her play.

Implications for Enhancing Quality Care

This re-envisioned vignette demonstrates a high-quality diapering session that supports Faith's optimal participation as a partner with her caregiver Amber. This re-envisioned diapering example also illustrates the positive experiences of Faith and her caregiver, Amber. Working within the moment-to-moment interactions that arise together, Amber, in a re-envisioning of the diapering experience, responds to Faith's interests with words of encouragement, using teaching moments that link with Faith's world—her interests and capabilities. Using a light touch, quiet dialogue, and slower pace, Amber gives Faith time to absorb meaning and make bodily adjustments in the diapering sequence. Amber uses content and context in real time to respond to and reciprocate Faith's curiosity and interest in everything around her. She explains, labels, and talks in a conversational way to promote Faith's development across the domains. Using encouragement, Amber sends a powerful message that supports Faith's motivation to explore and master new tasks that offer challenge in the safety of her caregiver's presence. Affection and warmth, vital for developing secure attachment and trust, are notable in their diapering relationship and expressed through the verbal and nonverbal communication of smiling, hand holding, and hugs. Each diapering change becomes a new opportunity for supporting a child's development across the domains. Vitally, the diapering relationship shifts from a custodial chore to an experience that requires Amber to adapt her frame of reference to include Faith's point of view, as a participant with Amber, rather than an object without ideas, motivations, and interests of her own.

Learn More

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Diapering Together. [DVD]. Kovach, B. (Director). (2013). Charlottesville, SC: Sunhead Projects LLC. Beyond Faith's and Amber's personal story, what lessons can be abstracted? What are the implications for professional preparation and for research related to infant and toddler care?

Pre-Service Teaching

A lack of specific training about infants and toddlers is evident in most early childhood programs in higher education (Horm et al., 2013). Findings from a national Early Childhood Teacher Education survey (Horm et al., 2013) found that only 29% of US colleges and universities included curriculum content targeting children under 4 years old, and 40% offered only one infant and toddler course (Early & Winton, 2001). Acquiring the knowledge and skills to work with infants and toddlers is critical to the long-term positive outcomes for this age group (Institute of Medicine & National Research Council, 2015). Some college students majoring in early childhood education (L. Baines, personal communication, April 2011) reported never having held a baby (as cited in Horm et al., 2013). Although beyond the scope of this article, pre-service programs could include more infant and toddler content and additional focus on care routines, specifically diaper changing, as a vital component of infant and toddler curriculum. Practicum placements in high-quality infant and toddler classrooms would also help strengthen knowledge and skills in infant-toddler care and education.

In-Service Caregiver Training and Research Implications

The anecdotal narrative described in this article was part of a larger study examining caregiver-child interactions, child wellbeing, and child involvement during diaper-changing routines in infant and toddler classrooms. Results from the larger study conducted by the author revealed that a child's well-being and involvement, significantly influenced by a caregiver's level of responsiveness and encouragement, is also different across caregiver roles. This means that a caregiver who responds with encouragement, like Amber in the re-envisioned vignette, is actively supporting the child's exploration, initiative, and curiosity by allowing the child to make choices and by showing enthusiasm for the child's effort to do things on her own. Caregivers who are responsive are paying attention to the child's interests, changing pace to meet the child's needs, and showing understanding or acceptance of a child's emotions, and the child's use of words or sounds to communicate.

Addressing the current void in the literature on professional development research specifically for infant and toddler caregivers is needed (Zaslow et al., 2010). Notably, questions examining the unique needs of infants' and toddlers' in non-parental care would target caregiver training specific to infant and toddler development across the developmental domains, informed by current research. A high priority placed on theory to practice would address interactions in which caregivers are engaged with infants and toddlers based on collaborative care where power is shared between a caregiver and child (Horm et al., 2016; McMullen & McCormick, 2016).

Conclusion

The importance of caregiver-child interactions in producing child outcomes is well-documented in a large and growing body of literature (Horm et al., 2016). Bronfenbrenner identified moment-to-moment interactions as a vital element of the relationship between caregivers and children. Thus, both theory and research support the conclusion that caregiver-child interactions are critically important in supporting a child's development. Unfortunately, opportunities to provide highquality responsive care in infant and toddler classrooms during routines is often squandered. Diaper changing, frequently approached with haste, on average 3 minutes in length, (Laurin, 2015, 2017), typically provides little time for relationship-building experiences to occur. Diaper changing and other toileting routines are often undervalued and not approached as a central element in infant and toddler classroom care. For the most part, disease prevention and hygienic procedures shape caregiver practices in diaper changing and eclipse this rare one-on-one moment between a caregiver and child as a precious time in the hustle-bustle of the day. Ensuring that infants and toddlers flourish and thrive in infant and toddler classrooms, rather

than just survive (McMullen & McCormick, 2016), requires diaper change routines be re-envisioned and approached as significant one-on-one experiences for conveying the highest quality of care through sensitive, timely, and responsive actions with caregivers.

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